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Behr, S., and Schriever, F. Engaging CD19 or target of an antiproliferative antibody 1 on human B lymphocytes induces binding of B cells to the interfollicular stroma of human tonsils via integrin $\alpha4/\beta1$ and fibronectin. 1191.
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Clark, R.L. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.
Coder, D. *See* Kahn, Wleklinski, Aruffo, Farr, Coder, and Kahn.
Coligan, J.E. *See* Wizel, Houghten, Parker, Coligan, Church, Gordon, Ballou, and Hoffman.
Collins, P.D., Marleau, S., Griffiths-Johnson, D.A., Jose, P.J., and Williams, T.J. Cooperation between interleukin-5 and the chemokine eotaxin to induce eosinophil accumulation in vivo. 1169.
Colombel, J.F. *See* Wallaert, Desreumaux, Copin, Tillie, Benard, Colombel, Gosselin, Tonnel, and Janin.
Colotta, F. *See* Muzio, Polentarutti, Sironi, Poli, De Gioia, Introna, Mantovani, and Colotta.
Conner, D.A. *See* Hendrickson, Conner, Ladd, Kendall, Casanova, Corthesy, Max, Neutra, Seidman, and Seidman.
Connolly, K.M. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.

Constant, S., Pfeiffer, C., Woodard, A., Pasqualini, T., and Bottomly, K. Extent of T cell receptor ligation can determine the functional differentiation of naive CD4+ T cells. 1591.
Conte, R. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
Convit, J. *See* Cabrera, Shaw, Sharples, Williams, Castes, Convit, and Blackwell.
Conway, J.G., Wakefield, J.A., Brown, R.H., Marron, B.E., Sekut, L., Stimpson, S.A., McElroy, A., Menius, J.A., Jeffreys, J.J., Clark, R.L., McGeehan, G.M., and Connolly, K.M. Inhibition of cartilage and bone destruction in adjuvant arthritis in the rat by a matrix metalloproteinase inhibitor. 449.
Cook, J.A. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.
Cooper, M.D. *See* Billips, Nuñez, Bertrand, Stankovic, Gartland, Burrows, and Cooper.
Copin, M.C. *See* Wallaert, Desreumaux, Copin, Tillie, Benard, Colombel, Gosselin, Tonnel, and Janin.
Cordova, J.L. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.
Corthesy, B. *See* Hendrickson, Conner, Ladd, Kendall, Casanova, Corthesy, Max, Neutra, Seidman, and Seidman.
Cory, G.O.C., Lovering, R.C., Hinshelwood, S., MacCarthy-Morrogh, L., Levinsky, R.J., and Kinnon, C. The protein product of the *c-cbl* protooncogene is phosphorylated after B cell receptor stimulation and binds the SH3 domain of Bruton's tyrosine kinase. 611.
Costa, P. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
Costamagna, C. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Coulie, P.G. *See* Romero, Pannetier, Herman, Jongeneel, Cerottini, and Coulie.
Cox, G.W. *See* Melillo, Musso, Sica, Taylor, Cox, and Varesio.
Craft, J.E. *See* Hughes, Hayday, Craft, Owen, and Crispe.
Crispe, I.N. *See* Hughes and Crispe.
— *See* Hughes, Hayday, Craft, Owen, and Crispe.
Croteau, G. *See* Fleury, Thibodeau, Croteau, Labrecque, Aronson, Cantin, Long, and Sékaly.
Crow, M.K. *See* Schattner, Elkon, Yoo, Tumang, Krammer, Crow, and Friedman.
Csaky, K.G. *See* Marchese, Chedid, Dirsch, Csaky, Santanelli, Latini, LaRochelle, Torrisi, and Aaronson.
Cuzner, M.L. *See* Windhagen, Newcombe, Dangond, Strand, Woodroofe, Cuzner, and Hafler.
Cyster, J.G., and Goodnow, C.C. Pertussis toxin inhibits migration of B and T lymphocytes into splenic white pulp cords. 581.
Czernik, A.J. *See* Valentine, Czernik, Rachie, Hidaka, Fisher, Cambier, and Bomsztyk.

D

Dal Canto, M.C. *See* McRae, Vanderlugt, Dal Canto, and Miller.
Dal Porto, J. *See* Han, Zheng, Dal Porto, and Kelsoe.
Danahey, K.M. *See* Maguire, Danahey, Burkly, and van Seventer.
Dangond, F. *See* Windhagen, Newcombe, Dangond, Strand, Woodroofe, Cuzner, and Hafler.
Daniel, K.C. *See* Del Prete, De Carli, D'Elios, Daniel, Almerigogna, Alderson, Smith, Thomas, and Romagnani.
Danieli, C. *See* Sallusto, Cella, Danieli, and Lanzavecchia.
Dargan, C.M. *See* Zhang, Giangreco, Broome, Dargan, and Swain.
Darzynkiewicz, Z. *See* Skorski, Nieborowska-Skorska, Campbell, Iozzo, Zon, Darzynkiewicz, and Calabretta.
Datta, M. *See* Ma, Datta, Margosian, Chen, and Horak.
David, C.S. *See* Khare, Luthra, and David.
Davidson, N.J. *See* Berg, Leach, Kühn, Rajewsky, Müller, Davidson, and Rennick.
D'Avirro, N. *See* Tachibana, Sato, D'Avirro, and Morimoto.
Davis, K. *See* Openshaw, Murphy, Hosken, Maino, Davis, Murphy, and O'Garra.
De Backer, O. *See* Van den Eynde, Peeters, De Backer, Gaugler, Lucas, and Boon.
De Carli, M. *See* Del Prete, De Carli, D'Elios, Daniel, Almerigogna, Alderson, Smith, Thomas, and Romagnani.
Decaudin, D. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.
DeFranco, A.L. *See* Hambleton, McMahon, and DeFranco.
De Gioia, L. *See* Muzio, Polentarutti, Sironi, Poli, De Gioia, Introna, Mantovani, and Colotta.
DeGraff, W. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.
Deharo, E. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
D'Elios, M.M. *See* Del Prete, De Carli, D'Elios, Daniel, Almerigogna, Alderson, Smith, Thomas, and Romagnani.
Delneste, Y. *See* Jeannin, Delneste, Lecoanet-Henchoz, Gauchat, Life, Holmes, and Bonnefoy.
Del Prete, G., De Carli, M., D'Elios, M.M., Daniel, K.C., Almerigogna, F., Alderson, M., Smith, C.A., Thomas, E., and Romagnani, S. CD30-mediated signaling promotes the development of human T helper type 2–like T cells. 1655.
Denfeld, R.W. *See* Hollenbaugh, Mischel-Petty, Edwards, Simon, Denfeld, Kiener, and Aruffo.
Desreumaux, P. *See* Wallaert, Desreumaux, Copin, Tillie, Benard, Colombel, Gosselin, Tonnel, and Janin.
Diaconu, E. *See* Pearlman, Lass, Bardenstein, Kopf, Hazlett, Diaconu, and Kazura.
Di Cesare, P.E. *See* Amin, Di Cesare, Vyas, Attur, Tzeng, Billiar, Stuchin, and Abramson.
Dickmeiss, E. *See* Ullum, Gøtzsche, Victor, Dickmeiss, Skinhøj, and Pedersen.
Di Donato, C. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
Di Donato, F. *See* Chan, Di Donato, Hamel, Tseng, and Buyon.
DiPaolo, R.J. *See* Sperling, Green, Mosley, Smith, DiPaolo, Klein, Bluestone, and Thompson.
Di Rosa, F. *See* Epstein, Di Rosa, Jankovic, Sher, and Matzinger.
Dirsch, O.R. *See* Marchese, Chedid, Dirsch, Csaky, Santanelli, Latini, LaRochelle, Torrisi, and Aaronson.
DiSanto, J. *See* LaFace, Vestberg, Yang, Srivastava, DiSanto, Flomenberg, Brown, Sherman, and Peterson.
Dohlsten, M. *See* Mehindate, Thibodeau, Dohlsten, Kalland, Sékaly, and Mourad.
Donermeyer, D.L., Beisel, K.W., Allen, P.M., and Smith, S.C. Myocarditis-inducing epitope of myosin binds constitutively and stably to I-A^k on antigen-presenting cells in the heart. 1291.
Dorf, M.E. *See* Abromson-Leeman, Bronson, and Dorf.
Dorweiler, B. *See* Bhakdi, Dorweiler, Kirchmann, Torzewski, Weise, Tranum-Jensen, Walev, and Wieland.
Druilhe, P. *See* Bouharoun-Tayoun, Oeuvray, Lunel, and Druilhe.
Duclos, A.J. *See* Haddad, Duclos, and Baines.
Dunbar, C.E. *See* Bock, Orlic, Dunbar, Broxmeyer, and Bodine.
Dunn-Walters, D.K., Isaacson, P.G., and Spencer, J. Analysis of mutations in immunoglobulin heavy chain variable region genes of microdissected marginal zone (MGZ) B cells suggests that the MGZ of human spleen is a reservoir of memory B cells. 559.
Dustin, L.B. *See* Nakayama, Nakayama, Dustin, and Loh.
Dustin, M.L. *See* Miller, Knorr, Ferrone, Houdei, Carron, and Dustin.

E

Eastman, S. *See* Morkowski, Goldrath, Eastman, Ramachandra, Freed, Whiteley, and Rudensky.
Ebata, T. *See* Kayagaki, Kawasaki, Ebata, Ohmoto, Ikeda, Inoue, Yoshino, Okumura, and Yagita.
Edwards, C.K., III *See* Zhou, Edwards, and Mountz.
Edwards, C.P. *See* Hollenbaugh, Mischel-Petty, Edwards, Simon, Denfeld, Kiener, and Aruffo.
Eggers, M., Boes-Fabian, B., Ruppert, T., Kloetzel, P.-M., and Koszinowski, U.H. The cleavage preference of the proteasome governs the yield of antigenic peptides. 1865.
Eiroa, A. *See* Liao, Huynh, Eiroa, Greene, Polizzi, and Muller.

Eisenstein, E. *See* Malchiodi, Eisenstein, Fields, Ohlendorf, Schlievert, Karjalainen, and Mariuzza.
Elbeik, T. *See* Staprans, Hamilton, Follansbee, Elbeik, Barbosa, Grant, and Feinberg.
Elies, R. *See* Ferrari, Levin, Wallukat, Elies, Lebesgue, Chiale, Elizari, Rosenbaum, and Hoebeke.
Elizari, M. *See* Ferrari, Levin, Wallukat, Elies, Lebesgue, Chiale, Elizari, Rosenbaum, and Hoebeke.
Elkon, K.B. *See* Schattner, Elkon, Yoo, Tumang, Krammer, Crow, and Friedman.
Elledge, S. *See* Tian, Taupin, Elledge, Robertson, and Anderson.
Ellerman, K.E., and Like, A.A. A major histocompatibility complex class II restriction for BioBreeding/Worcester diabetes–inducing T cells. 923.
Elliott, J.I., and Altmann, D.M. Dual T cell receptor α chain T cells in autoimmunity. 953.
Emilie, D. *See* Estaquier, Idziorek, Zou, Emilie, Farber, Bourez, and Ameisen.
Engel, P. *See* Chen, Engel, and Tedder.
English, N. *See* Lesley, English, Perschl, Gregoroff, and Hyman.
Ennis, F.A. *See* Zivny, Kurane, Leporati, Ibe, Takiguchi, Zeng, Brinton, and Ennis.
Epstein, M.M., Di Rosa, F., Jankovic, D., Sher, A., and Matzinger, P. Successful T cell priming in B cell–deficient mice. 915.
Ernst, B., Surh, C.D., and Sprent, J. Thymic selection and cell division. 961.
Ernst, P.B. *See* Klimpel, Chopra, Langley, Wypych, Annable, Kaiserlian, Ernst, and Peterson.
Erttmann, K.D. *See* Gallin, Jacobi, Büttner, Schönberger, Marti, and Erttmann.
Estaquier, J., Idziorek, T., Zou, W., Emilie, D., Farber, C.-M., Bourez, J.-M., and Ameisen, J.C. T helper type 1/T helper type 2 cytokines and T cell death: preventive effect of interleukin 12 on activation-induced and CD95 (FAS/APO-1)–mediated apoptosis of CD4+T cells from human immunodeficiency virus–infected persons. 1759.

F

Faath, S. *See* Arnold, Faath, Rammensee, and Schild.
Falcioni, F., Vidović, D., Ward, E.S., Bolin, D., Singh, G., Shah, H., Ober, B., and Nagy, Z.A. Self tolerance to T cell receptor Vβ sequences. 249.
Falco, M. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
Falk, C.S., Steinle, A., and Schendel, D.J. Expression of HLA-C molecules confers target cell resistance to some non–major histocompatibility complex–restricted T cells in a manner analogous to allospecific natural killer cells. 1005.
Farber, C.-M. *See* Estaquier, Idziorek, Zou, Emilie, Farber, Bourez, and Ameisen.
Farber, J.M. *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.
— *See* Liao, Rabin, Yannelli, Koniaris, Vanguri, and Farber.
Fardeau, M. *See* Khurana, Prendergast, Alameddine, Tomé, Fardeau, Arahata, Sugita, and Kunkel.
Fargeas, C.A., Truneh, A., Reddy, M., Hurle, M., Sweet, R., and Sékaly, R.-P. Identification of residues in the V domain of CD80 (B7-1) implicated in functional interactions with CD28 and CTLA4. 667.
Farr, A. *See* Kahn, Wleklinski, Aruffo, Farr, Coder, and Kahn.
Fedoseyeva, E.V., Tam, R.C., Orr, P.L., Garovoy, M.R., and Benichou, G. Presentation of a self-peptide for in vivo tolerance induction of CD4+ T cells is governed by a processing factor that maps to the class II region of the major histocompatibility complex locus. 1481.
Feinberg, M.B. *See* Staprans, Hamilton, Follansbee, Elbeik, Barbosa, Grant, and Feinberg.
Feingold, K.R. *See* Read, Grunfeld, Kumwenda, Calhoun, Kane, Feingold, and Rapp.
Feldman, M.A.V. *See* Bender, Bui, Feldman, Larsson, and Bhardwaj.
Ferrara, J.L.M. *See* Akhtar, Gold, Pan, Ferrara, Yang, Kim, and Tan.
Ferrari, I., Levin, M.J., Wallukat, G., Elies, R., Lebesgue, D., Chiale, P., Elizari, M., Rosenbaum, M., and Hoebeke, J. Molecular mimicry between the immunodominant ribosomal protein PO of *Trypanosoma cruzi* and a functional epitope on the human β_1-adrenergic receptor. 59.
Ferrone, M. *See* Miller, Knorr, Ferrone, Houdei, Carron, and Dustin.
Fields, B.A. *See* Malchiodi, Eisenstein, Fields, Ohlendorf, Schlievert, Karjalainen, and Mariuzza.
Findlay, D.M. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Finkelman, F.D. Relationships among antigen presentation, cytokines, immune deviation, and autoimmune disease. 279.
— *See* Gavett, O'Hearn, Li, Huang, Finkelman, and Wills-Karp.
Fisher, C.L. *See* Valentine, Czernik, Rachie, Hidaka, Fisher, Cambier, and Bomsztyk.
Flavell, R.A. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.
Fleischhauer, K. *See* van Endert, Riganelli, Greco, Fleischhauer, Sidney, Sette, and Bach.
Fleury, S., Thibodeau, J., Croteau, G., Labrecque, N., Aronson, H.-E., Cantin, C., Long, E.O., and Sékaly, R.-P. HLA-DR polymorphism affects the interaction with CD4. 733.
Flomenberg, N. *See* LaFace, Vestberg, Yang, Srivastava, DiSanto, Flomenberg, Brown, Sherman, and Peterson.
Fodor, W.L. *See* Rother, Fodor, Springhorn, Birks, Setter, Sandrin, Squinto, and Rollins.
Folkman, J. *See* Cao, Chen, Weatherbee, Tsang, and Folkman.
Follansbee, S.E. *See* Staprans, Hamilton, Follansbee, Elbeik, Barbosa, Grant, and Feinberg.
Foy, T.M., Page, D.M., Waldschmidt, T.J., Schoneveld, A., Laman, J.D., Masters, S.R., Tygrett, L., Ledbetter, J.A., Aruffo, A., Claassen, E., Xu, J.C., Flavell, R.A., Oehen, S., Hedrick, S.M., and Noelle, R.J. An essential role for gp39, the ligand for CD40, in thymic selection. 1377.
Frank, D. *See* Chauhan, Kharbanda, Ogata, Urashima, Frank, Malik, Kufe, and Anderson.
Franklin, J. *See* Jones, Rivera, Sgadari, Franklin, Max, Bhatia, and Tosato.
Fraser, J.D. *See* Hudson, Tiedemann, Urban, Lowe, Strominger, and Fraser.
Freed, D.C. *See* Morkowski, Goldrath, Eastman, Ramachandra, Freed, Whiteley, and Rudensky.
Fridman, W.H. *See* Bouchard, Galinha, Tartour, Fridman, and Sautès.
Fried, I. *See* Koka, He, Zack, Kitchen, Peacock, Fried, Tran, Yashar, and Merrill.
Friede, T. *See* Barouch, Friede, Stevanović, Tussey, Smith, Rowland-Jones, Braud, McMichael, and Rammensee.
Friedman, N. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.
Friedman, S.M. *See* Schattner, Elkon, Yoo, Tumang, Krammer, Crow, and Friedman.
Friend, D. *See* Boyce, Friend, Matsumoto, Austen, and Owen.
Fu, F. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.
Fung, J.J. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.
Fuss, I. *See* Neurath, Fuss, Kelsall, Stüber, and Strober.

G

Gabrielli, G. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Galibert, L. *See* Garrone, Neidhardt, Garcia, Galibert, van Kooten, and Banchereau.
Galinha, A. *See* Bouchard, Galinha, Tartour, Fridman, and Sautès.
Galle, P.R., Hofmann, W.J., Walczak, H., Schaller, H., Otto, G., Stremmel, W., Krammer, P.H., and Runkel, L. Involvement of the CD95 (APO-1/Fas) receptor and ligand in liver damage. 1223.
Gallin, J.I. *See* Jackson, Gallin, and Holland.

Gallin, M.Y., Jacobi, A.B., Büttner, D.W., Schönberger, Ö., Marti, T., and Erttmann, K.D. Human autoantibody to defensin: disease association with hyperreactive onchocerciasis (sowda). 41.
Gallo, N. *See* Pope, Gezelter, Gallo, Hoffman, and Steinman.
Gallon, L. *See* Khoury, Gallon, Chen, Betres, Russell, Hancock, Carpenter, Sayegh, and Weiner.
Garcia, E. *See* Garrone, Neidhardt, Garcia, Galibert, van Kooten, and Banchereau.
Garovoy, M.R. *See* Fedoseyeva, Tam, Orr, Garovoy, and Benichou.
Garrone, P., Neidhardt, E.-M., Garcia, E., Galibert, L., van Kooten, C., and Banchereau, J. Fas ligation induces apoptosis of CD40-activated human B lymphocytes. 1265.
Gartland, G.L. *See* Billips, Nuñez, Bertrand, Stankovic, Gartland, Burrows, and Cooper.
Gauchat, J.-F. *See* Jeannin, Delneste, Lecoanet-Henchoz, Gauchat, Life, Holmes, and Bonnefoy.
Gaugler, B. *See* Van den Eynde, Peeters, De Backer, Gaugler, Lucas, and Boon.
Gauthier, S. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.
Gautret, P. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Gavett, S.H., O'Hearn, D.J., Li, X., Huang, S.-K., Finkelman, F.D., and Wills-Karp, M. Interleukin 12 inhibits antigen-induced airway hyperresponsiveness, inflammation, and Th2 cytokine expression in mice. 1527.
Gelfand, E.W., Weinberg, K., Mazer, B.D., Kadlecek, T.A., and Weiss, A. Absence of ZAP-70 prevents signaling through the antigen receptor on peripheral blood T cells but not on thymocytes. 1057.
Gerber, D. *See* Pereira, Gerber, Huang, and Tonegawa.
Germain, R.N. *See* König, Shen, and Germain.
— *See* Reis e Sousa and Germain.
— *See* Romagnoli and Germain.
Geuze, H.J. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Geuze, H.J. *See* Peters, Raposo, Neefjes, Oorschot, Leijendekker, Geuze, and Ploegh.
Geysen, H.M. *See* Nanda, Arzoo, Geysen, Sette, and Sercarz.
Gezelter, S. *See* Pope, Gezelter, Gallo, Hoffman, and Steinman.
Ghassemi, M. *See* Saifuddin, Parker, Peeples, Gorny, Zolla-Pazner, Ghassemi, Rooney, Atkinson, and Spear.
Ghigo, D., Todde, R., Ginsburg, H., Costamagna, C., Gautret, P., Bussolino, F., Ulliers, D., Giribaldi, G., Deharo, E., Gabrielli, G., Pescarmona, G., and Bosia, A. Erythrocyte stages of *Plasmodium falciparum* exhibit a high nitric oxide synthase (NOS) activity and release an NOS-inducing soluble factor. 677.
Giangreco, L. *See* Zhang, Giangreco, Broome, Dargan, and Swain.
Gilboa, E. *See* Porgador and Gilboa.
Gilleaudeau, P. *See* Krueger, Wolfe, Nabeya, Vallat, Gilleaudeau, Heftler, Austin, and Gottlieb.
Ginsburg, H. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Giribaldi, G. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Gold, J.P. *See* Akhtar, Gold, Pan, Ferrara, Yang, Kim, and Tan.
Goldrath, A.W. *See* Morkowski, Goldrath, Eastman, Ramachandra, Freed, Whiteley, and Rudensky.
Gollob, J.A., Li, J., Reinherz, E.L., and Ritz, J. CD2 regulates responsiveness of activated T cells to interleukin 12. 721. Correction. 1175.
Goodnow, C.C. *See* Cyster and Goodnow.
Gordon, D.M. *See* Wizel, Houghten, Parker, Coligan, Church, Gordon, Ballou, and Hoffman.
Gorny, M.K. *See* Saifuddin, Parker, Peeples, Gorny, Zolla-Pazner, Ghassemi, Rooney, Atkinson, and Spear.
Gosselin, B. *See* Wallaert, Desreumaux, Copin, Tillie, Benard, Colombel, Gosselin, Tonnel, and Janin.
Gottlieb, A.B. *See* Krueger, Wolfe, Nabeya, Vallat, Gilleaudeau, Heftler, Austin, and Gottlieb.
Gøtzsche, P.C. *See* Ullum, Gøtzsche, Victor, Dickmeiss, Skinhøj, and Pedersen.
Govoni, G. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.
Grabstein, K.H. *See* Seder, Grabstein, Berzofsky, and McDyer.
Grant, R.M. *See* Staprans, Hamilton, Follansbee, Elbeik, Barbosa, Grant, and Feinberg.
Greco, G. *See* van Endert, Riganelli, Greco, Fleischhauer, Sidney, Sette, and Bach.
Green, D.R. *See* Martin, Reutelingsperger, McGahon, Rader, van Schie, LaFace, and Green.
Green, J.M. *See* Sperling, Green, Mosley, Smith, DiPaolo, Klein, Bluestone, and Thompson.
Greenberg, S.M. *See* Luster, Greenberg, and Leder.
Greene, T. *See* Liao, Huynh, Eiroa, Greene, Polizzi, and Muller.
Gregoroff, J. *See* Lesley, English, Perschl, Gregoroff, and Hyman.
Griffiths-Johnson, D.A. *See* Collins, Marleau, Griffiths-Johnson, Jose, and Williams.
Grillot, D.A.M., Merino, R., and Núñez, G. Bcl-x_L displays restricted distribution during T cell development and inhibits multiple forms of apoptosis but not clonal deletion in transgenic mice. 1973.
Gros, P. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.
Grunfeld, C. *See* Read, Grunfeld, Kumwenda, Calhoun, Kane, Feingold, and Rapp.
Gürr, W. *See* Braun, McKechnie, and Gürr.

H

Hachicha, M., Naccache, P.H., and McColl, S.R. Inflammatory microcrystals differentially regulate the secretion of macrophage inflammatory protein 1 and interleukin 8 by human neutrophils: a possible mechanism of neutrophil recruitment to sites of inflammation in synovitis. 2019.
Haddad, E.K., Duclos, A.J., and Baines, M.G. Early embryo loss is associated with local production of nitric oxide by decidual mononuclear cells. 1143.
Hafler, D.A. *See* Windhagen, Newcombe, Dangond, Strand, Woodroofe, Cuzner, and Hafler.
Hailman, E. *See* Kusunoki, Hailman, Juan, Lichenstein, and Wright.
Halloran, M. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.
Hambleton, J., McMahon, M., and DeFranco, A.L. Activation of Raf-1 and mitogen-activated protein kinase in murine macrophages partially mimics lipopolysaccharide-induced signaling events. 147.
Hamel, J.C. *See* Chan, Di Donato, Hamel, Tseng, and Buyon.
Hamilton, B.L. *See* Staprans, Hamilton, Follansbee, Elbeik, Barbosa, Grant, and Feinberg.
Han, S., Zheng, B., Dal Porto, J., and Kelsoe, G. In situ studies of the primary immune response to (4-hydroxy-3-nitrophenyl)acetyl. IV. Affinity-dependent, antigen-driven B cell apoptosis in germinal centers as a mechanism for maintaining self-tolerance. 1635.
Hancock, W.W. *See* Khoury, Gallon, Chen, Betres, Russell, Hancock, Carpenter, Sayegh, and Weiner.
Hannun, Y.A. *See* Lauledernkind, Bielawska, Raghow, Hannun, and Ballou.
Hara, I., Takechi, Y., and Houghton, A.N. Implicating a role for immune recognition of self in tumor rejection: passive immunization against the *brown* locus protein. 1609.
Hart, B.J. *See* Hewitt, Brown, Hart, and Pritchard.
Hasegawa, K. *See* Sato, Ohtsuka, Hasegawa, Yamagiwa, Watanabe, Asakura, and Abo.
Haslam, D. *See* Winberg, Möllby, Bergström, Karlsson, Leonardsson, Milh, Teneberg, Haslam, Marklund, and Normark.
Haviland, D.L. *See* McCoy, Haviland, Molmenti, Ziambaras, Wetsel, and Perlmutter.
Hayday, A. *See* Hughes, Hayday, Craft, Owen, and Crispe.
Hazlett, F.E., Jr. *See* Pearlman, Lass, Bardenstein, Kopf, Hazlett, Diaconu, and Kazura.
He, K. *See* Koka, He, Zack, Kitchen, Peacock, Fried, Tran, Yashar, and Merrill.
Heath, A.W. *See* Hosken, Shibuya, Heath, Murphy, and O'Garra.
Hedrick, S.M. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.
Heftler, N.S. *See* Krueger, Wolfe, Nabeya, Vallat, Gilleaudeau, Heftler, Austin, and Gottlieb.

Hellman, J. *See* Airas, Hellman, Salmi, Bono, Puurunen, Smith, and Jalkanen.
Hendrickson, B.A., Conner, D.A., Ladd, D.J., Kendall, D., Casanova, J.E., Corthesy, B., Max, E.E., Neutra, M.R., Seidman, C.E., and Seidman, J.G. Altered hepatic transport of immunoglobulin A in mice lacking the J chain. 1905.
Hengartner, H. *See* Aichele, Brduscha-Riem, Zinkernagel, Hengartner, and Pircher.
Herman, J. *See* Romero, Pannetier, Herman, Jongeneel, Cerottini, and Coulie.
Hewitt, C.R.A., Brown, A.P., Hart, B.J., and Pritchard, D.I. A major house dust mite allergen disrupts the immunoglobulin E network by selectively cleaving CD23: innate protection by antiproteases. 1537.
Hidaka, H. *See* Valentine, Czernik, Rachie, Hidaka, Fisher, Cambier, and Bomsztyk.
Hilbert, D.M., Kopf, M., Mock, B.A., Köhler, G., and Rudikoff, S. Interleukin 6 is essential for in vivo development of B lineage neoplasms. 243.
Hinshelwood, S. *See* Cory, Lovering, Hinshelwood, MacCarthy-Morrogh, Levinsky, and Kinnon.
Hirota, H. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Hirsch, T. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.
Hitchman, E. *See* Węsierska-Gądek, Hohenauer, Hitchman, and Penner.
Hodes, R.J. Molecular alterations in the aging immune system. 1.
Hoebeke, J. *See* Ferrari, Levin, Wallukat, Elies, Lebesgue, Chiale, Elizari, Rosenbaum, and Hoebeke.
Hoffman, L. *See* Pope, Gezelter, Gallo, Hoffman, and Steinman.
Hoffman, S.L. *See* Wizel, Houghten, Parker, Coligan, Church, Gordon, Ballou, and Hoffman.
Hofmann, W.J. *See* Galle, Hofmann, Walczak, Schaller, Otto, Stremmel, Krammer, and Runkel.
Hohenauer, H. *See* Węsierska-Gądek, Hohenauer, Hitchman, and Penner.
Holland, S.M. *See* Jackson, Gallin, and Holland.
Hollenbaugh, D., Mischel-Petty, N., Edwards, C.P., Simon, J.C., Denfeld, R.W., Kiener, P.A., and Aruffo, A. Expression of functional CD40 by vascular endothelial cells. 33.
Holmes, D. *See* Jeannin, Delneste, Lecoanet-Henchoz, Gauchat, Life, Holmes, and Bonnefoy.
Holzknecht, R.A. *See* Saadi, Holzknecht, Patte, Stern, and Platt.
Hombach, J., Pircher, H., Tonegawa, S., and Zinkernagel, R.M. Strictly transporter of antigen presentation–dependent presentation of an immunodominant cytotoxic T lymphocyte epitope in the signal sequence of a virus protein. 1615.
Homma, Y. *See* Takata, Homma, and Kurosaki.
Horak, I. *See* Ma, Datta, Margosian, Chen, and Horak.
Hosken, N.A., Shibuya, K., Heath, A.W., Murphy, K.M., and O'Garra, A. The effect of antigen dose on CD4$^+$ T helper cell phenotype development in a T cell receptor–$\alpha\beta$–transgenic model. 1579.
— *See* Openshaw, Murphy, Hosken, Maino, Davis, Murphy, and O'Garra.
Houdei, R. *See* Miller, Knorr, Ferrone, Houdei, Carron, and Dustin.
Houghten, R.A. *See* Wizel, Houghten, Parker, Coligan, Church, Gordon, Ballou, and Hoffman.
Houghton, A.N. *See* Hara, Takechi, and Houghton.
Huang, A.Y.C. *See* Wu, Huang, Jaffee, Levitsky, and Pardoll.
Huang, S.-K. *See* Gavett, O'Hearn, Li, Huang, Finkelman, and Wills-Karp.
Huang, S.Y. *See* Pereira, Gerber, Huang, and Tonegawa.
Hubbe, M. *See* Altevogt, Hubbe, Ruppert, Lohr, von Hoegen, Sammar, Andrew, McEvoy, Humphries, and Butcher.
Hudson, K.R., Tiedemann, R.E., Urban, R.G., Lowe, S.C., Strominger, J.L., and Fraser, J.D. Staphylococcal enterotoxin A has two cooperative binding sites on major histocompatibility complex class II. 711.
Huerre, M. *See* Phalipon, Kaufmann, Michetti, Cavaillon, Huerre, Sansonetti, and Kraehenbuhl.
Hughes, D.P.M., Hayday, A., Craft, J.E., Owen, M.J., and Crispe, I.N. T cells with γ/δ T cell receptors (TCR) of intestinal type are preferentially expanded in TCR-α–deficient lpr mice. 233.
Hughes, D.P.M., and Crispe, I.N. A naturally occurring soluble isoform of murine Fas generated by alternative splicing. 1395.
Huitinga, I. *See* Saoudi, Simmonds, Huitinga, and Mason.
Humphries, M.J. *See* Altevogt, Hubbe, Ruppert, Lohr, von Hoegen, Sammar, Andrew, McEvoy, Humphries, and Butcher.
Hünig, T. *See* Krämer, Schimpl, and Hünig.
Hurle, M. *See* Fargeas, Truneh, Reddy, Hurle, Sweet, and Sékaly.
Huston, M. *See* Lu, Riley, Babcock, Huston, Stark, Boss, and Ransohoff.
Huynh, H.K. *See* Liao, Huynh, Eiroa, Greene, Polizzi, and Muller.
Hyman, R. *See* Lesley, English, Perschl, Gregoroff, and Hyman.

I

Ibe, M. *See* Zivny, Kurane, Leporati, Ibe, Takiguchi, Zeng, Brinton, and Ennis.
Idziorek, T. *See* Estaquier, Idziorek, Zou, Emilie, Farber, Bourez, and Ameisen.
Ignatowicz, L. *See* Scherer, Ignatowicz, Pullen, Kappler, and Marrack.
Ikeda, S. *See* Kayagaki, Kawasaki, Ebata, Ohmoto, Ikeda, Inoue, Yoshino, Okumura, and Yagita.
Imhof, B.A. *See* Willimann, Matile, Weiss, and Imhof.
Inoue, S. *See* Kayagaki, Kawasaki, Ebata, Ohmoto, Ikeda, Inoue, Yoshino, Okumura, and Yagita.
Introna, M. *See* Muzio, Polentarutti, Sironi, Poli, De Gioia, Introna, Mantovani, and Colotta.
Iozzo, R.V. *See* Skorski, Nieborowska-Skorska, Campbell, Iozzo, Zon, Darzynkiewicz, and Calabretta.
Isaacson, P.G. *See* Dunn-Walters, Isaacson, and Spencer.
Ivashkiv, L.B. *See* Wang, Sengupta, Zhong, and Ivashkiv.
Iwamoto, I. *See* Sumida, Sakamoto, Murata, Makino, Takahashi, Yoshida, Nishioka, Iwamoto, and Taniguchi.

J

Jackson, S.H., Gallin, J.I., and Holland, S.M. The p47^{phox} mouse knock-out model of chronic granulomatous disease. 751.
Jacobi, A.B. *See* Gallin, Jacobi, Büttner, Schönberger, Marti, and Erttmann.
Jaffee, E.M. *See* Wu, Huang, Jaffee, Levitsky, and Pardoll.
Jalkanen, S. *See* Airas, Hellman, Salmi, Bono, Puurunen, Smith, and Jalkanen.
Janeway, C., Jr. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.
Janin, A. *See* Wallaert, Desreumaux, Copin, Tillie, Benard, Colombel, Gosselin, Tonnel, and Janin.
Jankovic, D. *See* Epstein, Di Rosa, Jankovic, Sher, and Matzinger.
Jankovic, M. *See* Papavasiliou, Jankovic, Suh, and Nussenzweig.
Jeannin, P., Delneste, Y., Lecoanet-Henchoz, S., Gauchat, J.-F., Life, P., Holmes, D., and Bonnefoy, J.-Y. Thiols decrease human interleukin (IL) 4 production and IL-4–induced immunoglobulin synthesis. 1785.
Jeffreys, J.J. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.
Johnson, S.A. *See* Kurosaki, Johnson, Pao, Sada, Yamamura, and Cambier.
Jones, K., Rivera, C., Sgadari, C., Franklin, J., Max, E.E., Bhatia, K., and Tosato, G. Infection of human endothelial cells with Epstein-Barr virus. 1213.
Jongeneel, C.V. *See* Romero, Pannetier, Herman, Jongeneel, Cerottini, and Coulie.
Jose, P.J. *See* Collins, Marleau, Griffiths-Johnson, Jose, and Williams.
Jothy, S. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.
Juan, T.S.-C. *See* Kusunoki, Hailman, Juan, Lichenstein, and Wright.

K

Kadlecek, T.A. *See* Gelfand, Weinberg, Mazer, Kadlecek, and Weiss.
Kahn, J. *See* Migaki, Kahn, and Kishimoto.

Kahn, M. *See* Kahn, Wleklinski, Aruffo, Farr, Coder, and Kahn.
Kahn, S., Wleklinski, M., Aruffo, A., Farr, A., Coder, D., and Kahn, M. *Trypanosoma cruzi* amastigote adhesion to macrophages is facilitated by the mannose receptor. 1243.
Kaiserlian, D. *See* Klimpel, Chopra, Langley, Wypych, Annable, Kaiserlian, Ernst, and Peterson.
Kalland, T. *See* Mehindate, Thibodeau, Dohlsten, Kalland, Sékaly, and Mourad.
Kane, J.P. *See* Read, Grunfeld, Kumwenda, Calhoun, Kane, Feingold, and Rapp.
Kappers, A.C. *See* Kooijman, Lauf, Kappers, and Rijkers.
Kappler, J. *See* Scherer, Ignatowicz, Pullen, Kappler, and Marrack.
Karjalainen, K. *See* Malchiodi, Eisenstein, Fields, Ohlendorf, Schlievert, Karjalainen, and Mariuzza.
Karlsson, K.-A. *See* Winberg, Möllby, Bergström, Karlsson, Leonardsson, Milh, Teneberg, Haslam, Marklund, and Normark.
Kast, W.M. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Katagiri, T. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Kato, A. *See* Miyatake, Nakano, Park, Yamazaki, Takase, Matsushime, Kato, and Saito.
Katoh, S., Zheng, Z., Oritani, K., Shimozato, T., and Kincade, P.W. Glycosylation of CD44 negatively regulates its recognition of hyaluronan. 419.
Kaufmann, M. *See* Phalipon, Kaufmann, Michetti, Cavaillon, Huerre, Sansonetti, and Kraehenbuhl.
Kavathas, P.B. *See* Sun, Leahy, and Kavathas.
Kawasaki, A. *See* Kayagaki, Kawasaki, Ebata, Ohmoto, Ikeda, Inoue, Yoshino, Okumura, and Yagita.
Kayagaki, N., Kawasaki, A., Ebata, T., Ohmoto, H., Ikeda, S., Inoue, S., Yoshino, K., Okumura, K., and Yagita, H. Metalloproteinase-mediated release of human Fas ligand. 1777.
Kazura, J.W. *See* Pearlman, Lass, Bardenstein, Kopf, Hazlett, Diaconu, and Kazura.
Keegan, A.D. *See* Kinzer, Keegan, and Paul.
Kelsall, B.L. *See* Neurath, Fuss, Kelsall, Stüber, and Strober.
Kelsoe, G. *See* Han, Zheng, Dal Porto, and Kelsoe.
Kendall, D. *See* Hendrickson, Conner, Ladd, Kendall, Casanova, Corthesy, Max, Neutra, Seidman, and Seidman.
Kenemans, P. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Kern, I. *See* Siegrist, Martinez-Soria, Kern, and Mach.
Kerner, J.D. *See* Appleby, Kerner, Chien, Maliszewski, Bondadaá, and Perlmutter.
Khanna, R. *See* Burrows, Silins, Moss, Khanna, Misko, and Argaet.
Kharbanda, S.M. *See* Chauhan, Kharbanda, Ogata, Urashima, Frank, Malik, Kufe, and Anderson.
Khare, S.D., Luthra, H.S., and David, C.S. Spontaneous inflammatory arthritis in HLA-B27 transgenic mice lacking β_2-microglobulin: a model of human spondyloarthropathies. 1153.
Khoury, S.J., Gallon, L., Chen, W., Betres, K., Russell, M.E., Hancock, W.W., Carpenter, C.B., Sayegh, M.H., and Weiner, H.L. Mechanisms of acquired thymic tolerance in experimental autoimmune encephalomyelitis: thymic dendritic-enriched cells induce specific peripheral T cell unresponsiveness in vivo. 357.
Khurana, T.S., Prendergast, R.A., Alameddine, H.S., Tomé, F.M.S., Fardeau, M., Arahata, K., Sugita, H., and Kunkel, L.M. Absence of extraocular muscle pathology in Duchenne's muscular dystrophy: role for calcium homeostasis in extraocular muscle sparing. 467.
Kiener, P.A. *See* Hollenbaugh, Mischel-Petty, Edwards, Simon, Denfeld, Kiener, and Aruffo.
Kim, J.I. *See* Akhtar, Gold, Pan, Ferrara, Yang, Kim, and Tan.
Kincade, P.W. *See* Katoh, Zheng, Oritani, Shimozato, and Kincade.
Kinnon, C. *See* Cory, Lovering, Hinshelwood, MacCarthy-Morrogh, Levinsky, and Kinnon.
Kinzer, C.A., Keegan, A.D., and Paul, W.E. Identification of FCεRI^{neg} mast cells in mouse bone marrow cell cultures. Use of a monoclonal anti-p161 antibody. 575.
— *See* Ryan, Kinzer, and Paul.
Kirchmann, R. *See* Bhakdi, Dorweiler, Kirchmann, Torzewski, Weise, Tranum-Jensen, Walev, and Wieland.
Kishimoto, H., Kubo, R.T., Yorifuji, H., Nakayama, T., Asano, Y., and Tada, T. Physical dissociation of the TCR–CD3 complex accompanies receptor ligation. 1997.
Kishimoto, T. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Kishimoto, T.K. *See* Migaki, Kahn, and Kishimoto.
Kitchen, S. *See* Koka, He, Zack, Kitchen, Peacock, Fried, Tran, Yashar, and Merrill.
Kleijmeer, M.J. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Klein, J.R. *See* Sperling, Green, Mosley, Smith, DiPaolo, Klein, Bluestone, and Thompson.
Kleinman, H.K. *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.
Klimpel, G.R., Chopra, A.K., Langley, K.E., Wypych, J., Annable, C.A., Kaiserlian, D., Ernst, P.B., and Peterson, J.W. A role for stem cell factor and C-kit in the murine intestinal tract secretory response to cholera toxin. 1931.
Kloetzel, P.-M. *See* Eggers, Boes-Fabian, Ruppert, Kloetzel, and Koszinowski.
Knorr, R. *See* Miller, Knorr, Ferrone, Houdei, Carron, and Dustin.
Köhler, G. *See* Hilbert, Kopf, Mock, Köhler, and Rudikoff.
Koka, P., He, K., Zack, J.A., Kitchen, S., Peacock, W., Fried, I., Tran, T., Yashar, S.S., and Merrill, J.E. Human immunodeficiency virus 1 envelope proteins induce interleukin 1, tumor necrosis factor α, and nitric oxide in glial cultures derived from fetal, neonatal, and adult human brain. 941.
Koniaris, L.G. *See* Liao, Rabin, Yannelli, Koniaris, Vanguri, and Farber.
König, R., Shen, X., and Germain, R.N. Involvement of both major histocompatibility complex class II α and β chains in CD4 function indicates a role for ordered oligomerization in T cell activation. 779.
Kooijman, R., Lauf, J.J., Kappers, A.C., and Rijkers, G.T. Insulin-like growth factor induces phosphorylation of immunoreactive insulin receptor substrate and its association with phosphatidylinositol-3 kinase in human thymocytes. 593.
Kopf, M. *See* Hilbert, Kopf, Mock, Köhler, and Rudikoff.
— *See* Pearlman, Lass, Bardenstein, Kopf, Hazlett, Diaconu, and Kazura.
Korsmeyer, S.J. *See* Chao, Linette, Boise, White, Thompson, and Korsmeyer.
Kostura, M.J. *See* Singer, Scott, Chin, Bayne, Limjuco, Weidner, Miller, Chapman, and Kostura.
Koszinowski, U.H. *See* Eggers, Boes-Fabian, Ruppert, Kloetzel, and Koszinowski.
Kou, Z.C. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.
Kourilsky, P. *See* Abastado, Lone, Casrouge, Boulot, and Kourilsky.
Kraehenbuhl, J.-P. *See* Phalipon, Kaufmann, Michetti, Cavaillon, Huerre, Sansonetti, and Kraehenbuhl.
Krämer, S., Schimpl, A., and Hünig, T. Immunopathology of interleukin (IL) 2–deficient mice: thymus dependence and suppression by thymus-dependent cells with an intact IL-2 gene. 1769.
Krammer, P.H. *See* Galle, Hofmann, Walczak, Schaller, Otto, Stremmel, Krammer, and Runkel.
— *See* Schattner, Elkon, Yoo, Tumang, Krammer, Crow, and Friedman.
Krishna, M.C. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.
Krishna, S. *See* Abdulkadir, Krishna, Thanos, Maniatis, Strominger, and Ono.
Kroemer, G. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.
Kronenberg, M. *See* Cardell, Tangri, Chan, Kronenberg, Benoist, and Mathis.
Krueger, J.G., Wolfe, J.T., Nabeya, R.T., Vallat, V.P., Gilleaudeau, P., Heftler, N.S., Austin, L.M., and Gottlieb, A.B. Successful ultraviolet B treatment of psoriasis is accompanied by a reversal of keratinocyte pathology and by selective depletion of intraepidermal T cells. 2057.
Krummel, M.F., and Allison, J.P. CD28 and CTLA-4 have opposing effects on the response of T cells to stimulation. 459.
Kubo, R.T. *See* Kishimoto, Kubo, Yorifuji, Nakayama, Asano, and Tada.
Kufe, D.W. *See* Chauhan, Kharbanda, Ogata, Urashima, Frank, Malik, Kufe, and Anderson.

Kühn, R. *See* Berg, Leach, Kühn, Rajewsky, Müller, Davidson, and Rennick.
Kumar, V. *See* Mason, Ortaldo, Young, Kumar, Bennett, and Anderson.
— *See* Stoneman, Bennett, An, Chesnut, Wakeland, Scheerer, Siciliano, Kumar, and Mathew.
Kumwenda, Z.L. *See* Read, Grunfeld, Kumwenda, Calhoun, Kane, Feingold, and Rapp.
Kunisada, T. *See* Yasunaga, Wang, Kunisada, Nishikawa, and Nishikawa.
Kunkel, L.M. *See* Khurana, Prendergast, Alameddine, Tomé, Fardeau, Arahata, Sugita, and Kunkel.
Kurane, I. *See* Zivny, Kurane, Leporati, Ibe, Takiguchi, Zeng, Brinton, and Ennis.
Kurosaki, T., Johnson, S.A., Pao, L., Sada, K., Yamamura, H., and Cambier, J.C. Role of the Syk autophosphorylation site and SH2 domains in B cell antigen receptor signaling. 1815.
— *See* Takata, Homma, and Kurosaki.
Kusunoki, T., Hailman, E., Juan, T.S.-C., Lichenstein, H.S., and Wright, S.D. Molecules from *Staphylococcus aureus* that bind CD14 and stimulate innate immune responses. 1673.

L

Labrecque, N. *See* Fleury, Thibodeau, Croteau, Labrecque, Aronson, Cantin, Long, and Sékaly.
Ladd, D.J. *See* Hendrickson, Conner, Ladd, Kendall, Casanova, Corthesy, Max, Neutra, Seidman, and Seidman.
LaFace, D.M., Vestberg, M., Yang, Y., Srivastava, R., DiSanto, J., Flomenberg, N., Brown, S., Sherman, L.A., and Peterson, P.A. Human CD8 transgene regulation of HLA recognition by murine T cells. 1315.
— *See* Martin, Reutelingsperger, McGahon, Rader, van Schie, LaFace, and Green.
Laman, J.D. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.
Lane, S.J. *See* Adcock, Lane, Brown, Lee, and Barnes.
Langley, K.E. *See* Klimpel, Chopra, Langley, Wypych, Annable, Kaiserlian, Ernst, and Peterson.
Lanzavecchia, A. *See* Sallusto, Cella, Danieli, and Lanzavecchia.
LaRochelle, W.J. *See* Marchese, Chedid, Dirsch, Csaky, Santanelli, Latini, LaRochelle, Torrisi, and Aaronson.
Larsson, M. *See* Bender, Bui, Feldman, Larsson, and Bhardwaj.
Lass, J.H. *See* Pearlman, Lass, Bardenstein, Kopf, Hazlett, Diaconu, and Kazura.
Latini, C. *See* Marchese, Chedid, Dirsch, Csaky, Santanelli, Latini, LaRochelle, Torrisi, and Aaronson.
Lauf, J.J. *See* Kooijman, Lauf, Kappers, and Rijkers.
Laulederkind, S.J.F., Bielawska, A., Raghow, R., Hannun, Y.A., and Ballou, L.R. Ceramide induces interleukin 6 gene expression in human fibroblasts. 599.
Leach, M.W. *See* Berg, Leach, Kühn, Rajewsky, Müller, Davidson, and Rennick.
Leahy, D.J. *See* Sun, Leahy, and Kavathas.
Lebesgue, D. *See* Ferrari, Levin, Wallukat, Elies, Lebesgue, Chiale, Elizari, Rosenbaum, and Hoebeke.
Lecoanet-Henchoz, S. *See* Jeannin, Delneste, Lecoanet-Henchoz, Gauchat, Life, Holmes, and Bonnefoy.
Ledbetter, J.A. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.
Leder, P. *See* Luster, Greenberg, and Leder.
Lee, T.H. *See* Adcock, Lane, Brown, Lee, and Barnes.
Lee-Parritz, D. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.
Leijendekker, R.L. *See* Peters, Raposo, Neefjes, Oorschot, Leijendekker, Geuze, and Ploegh.
Lekutis, C. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.
Lemström, K. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.
Leonardsson, I. *See* Winberg, Möllby, Bergström, Karlsson, Leonardsson, Milh, Teneberg, Haslam, Marklund, and Normark.
Leporati, A.M. *See* Zivny, Kurane, Leporati, Ibe, Takiguchi, Zeng, Brinton, and Ennis.
Lesley, J., English, N., Perschl, A., Gregoroff, J., and Hyman, R. Variant cell lines selected for alterations in the function of the hyaluronan receptor CD44 show differences in glycosylation. 431.
Letvin, N.L. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.
Levey, D.L., and Srivastava, P.K. T cells from late tumor–bearing mice express normal levels of $p56^{lck}$, $p59^{fyn}$, ZAP-70, and CD3ζ despite suppressed cytolytic activity. 1029.
Levin, M.J. *See* Ferrari, Levin, Wallukat, Elies, Lebesgue, Chiale, Elizari, Rosenbaum, and Hoebeke.
Levinsky, R.J. *See* Cory, Lovering, Hinshelwood, MacCarthy-Morrogh, Levinsky, and Kinnon.
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Li, J. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.
— *See* Gollob, Li, Reinherz, and Ritz.
Li, X. *See* Gavett, O'Hearn, Li, Huang, Finkelman, and Wills-Karp.
Li, Y., Yio, X.Y., and Mayer, L. Human intestinal epithelial cell–induced $CD8^+$ T cell activation is mediated through CD8 and the activation of CD8-associated $p56^{lck}$. 1079.
Liang, H.A. *See* Polacino, Liang, and Clark.
Liao, F., Huynh, H.K., Eiroa, A., Greene, T., Polizzi, E., and Muller, W.A. Migration of monocytes across endothelium and passage through extracellular matrix involve separate molecular domains of PECAM-1. 1337.
—, Rabin, R.L., Yannelli, J.R., Koniaris, L.G., Vanguri, P., and Farber, J.M. Human Mig chemokine: biochemical and functional characterization. 1301.
— *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.
Lichenstein, H.S. *See* Kusunoki, Hailman, Juan, Lichenstein, and Wright.
Life, P. *See* Jeannin, Delneste, Lecoanet-Henchoz, Gauchat, Life, Holmes, and Bonnefoy.
Like, A.A. *See* Ellerman and Like.
Limjuco, G. *See* Singer, Scott, Chin, Bayne, Limjuco, Weidner, Miller, Chapman, and Kostura.
Linette, G.P. *See* Chao, Linette, Boise, White, Thompson, and Korsmeyer.
Linsley, P.S. Distinct roles for CD28 and cytotoxic T lymphocyte–associated molecule-4 receptors during T cell activation? 289.
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Loh, D.Y. *See* Nakayama, Nakayama, Dustin, and Loh.
Lohr, J. *See* Altevogt, Hubbe, Ruppert, Lohr, von Hoegen, Sammar, Andrew, McEvoy, Humphries, and Butcher.
Lone, Y.-C. *See* Abastado, Lone, Casrouge, Boulot, and Kourilsky.
Long, E.O. *See* Fleury, Thibodeau, Croteau, Labrecque, Aronson, Cantin, Long, and Sékaly.
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Lovering, R.C. *See* Cory, Lovering, Hinshelwood, MacCarthy-Morrogh, Levinsky, and Kinnon.
Lowe, S.C. *See* Hudson, Tiedemann, Urban, Lowe, Strominger, and Fraser.
Lu, H.-T., Riley, J.L., Babcock, G.T., Huston, M., Stark, G.R., Boss, J.M., and Ransohoff, R.M. Interferon (IFN) β acts downstream of IFN-γ–induced class II transactivator messenger RNA accumulation to block major histocompatibility complex class II gene expression and requires the 48-kD DNA-binding protein, ISGF3-γ. 1517.
Lu, L., Rudert, W.A., Qian, S., McCaslin, D., Fu, F., Rao, A.S., Trucco, M., Fung, J.J., Starzl, T.E., and Thomson, A.W. Growth of donor-derived dendritic cells from the bone marrow of murine liver allograft recipients in response to granulocyte/macrophage colony-stimulating factor. 379.
Lucas, S. *See* Van den Eynde, Peeters, De Backer, Gaugler, Lucas, and Boon.
Lunel, F. *See* Bouharoun-Tayoun, Oeuvray, Lunel, and Druilhe.
Luster, A.D., Greenberg, S.M., and Leder, P. The IP-10 chemokine binds to a specific cell surface heparan sulfate site shared with platelet factor 4 and inhibits endothelial cell proliferation. 219.
Luthra, H.S. *See* Khare, Luthra, and David.

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Ma, A., Datta, M., Margosian, E., Chen, J., and Horak, I. T cells, but not B cells, are required for bowel inflammation in interleukin 2–deficient mice. 1567.

MacCarthy-Morrogh, L. *See* Cory, Lovering, Hinshelwood, MacCarthy-Morrogh, Levinsky, and Kinnon.

MacDonald, H.R. NK1.1$^+$ T cell receptor–α/β^+ cells: new clues to their origin, specificity, and function. 633.

Mach, B. *See* Siegrist, Martinez-Soria, Kern, and Mach.

Macho, A. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.

Maguire, J.E., Danahey, K.M., Burkly, L.C., and van Seventer, G.A. T cell receptor– and β_1 integrin–mediated signals synergize to induce tyrosine phosphorylation of focal adhesion kinase (pp125^{FAK}) in human T cells. 2079.

Mahanta, S.K. *See* Sugawara, Scholl, Mahanta, Ponath, and Strominger.

Maheshwari, S. *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.

Maino, V. *See* Openshaw, Murphy, Hosken, Maino, Davis, Murphy, and O'Garra.

Majuri, M.-L. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.

Makino, Y. *See* Sumida, Sakamoto, Murata, Makino, Takahashi, Yoshida, Nishioka, Iwamoto, and Taniguchi.

Malarkannan, S., Afkarian, M., and Shastri, N. A rare cryptic translation product is presented by K^b major histocompatibility complex class I molecule to alloreactive T cells. 1739.

Malchiodi, E.L., Eisenstein, E., Fields, B.A., Ohlendorf, D.H., Schlievert, P.M., Karjalainen, K., and Mariuzza, R.A. Superantigen binding to a T cell receptor β chain of known three-dimensional structure. 1833.

Malik, N. *See* Chauhan, Kharbanda, Ogata, Urashima, Frank, Malik, Kufe, and Anderson.

Maliszewski, C.R. *See* Appleby, Kerner, Chien, Maliszewski, Bondadaá, and Perlmutter.

Malo, D. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.

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Mantovani, A. *See* Muzio, Polentarutti, Sironi, Poli, De Gioia, Introna, Mantovani, and Colotta.

Marchese, C., Chedid, M., Dirsch, O.R., Csaky, K.G., Santanelli, F., Latini, C., LaRochelle, W.J., Torrisi, M.R., and Aaronson, S.A. Modulation of keratinocyte growth factor and its receptor in reepithelializing human skin. 1369.

Marchetti, P. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.

Margosian, E. *See* Ma, Datta, Margosian, Chen, and Horak.

Marguerie, G. *See* Tronik-Le, Roux, Roullot, Schweitzer, Berthier, and Marguerie.

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Marklund, B.-I. *See* Winberg, Möllby, Bergström, Karlsson, Leonardsson, Milh, Teneberg, Haslam, Marklund, and Normark.

Marleau, S. *See* Collins, Marleau, Griffiths-Johnson, Jose, and Williams.

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Marrack, P. *See* Scherer, Ignatowicz, Pullen, Kappler, and Marrack.

Marron, B.E. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.

Marti, T. *See* Gallin, Jacobi, Büttner, Schönberger, Marti, and Erttmann.

Martin, S.J., Reutelingsperger, C.P.M., McGahon, A.J., Rader, J.A., van Schie, R.C.A.A., LaFace, D.M., and Green, D.R. Early redistribution of plasma membrane phosphatidylserine is a general feature of apoptosis regardless of the initiating stimulus: inhibition by overexpression of Bcl-2 and Abl. 1545.

Martin, T.J. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.

Martinez-Soria, E. *See* Siegrist, Martinez-Soria, Kern, and Mach.

Mason, D. *See* Saoudi, Simmonds, Huitinga, and Mason.

— *See* Stumbles and Mason.

Mason, L.H., Ortaldo, J.R., Young, H.A., Kumar, V., Bennett, M., and Anderson, S.K. Cloning and functional characteristics of murine large granular lymphocyte-1: a member of the Ly-49 gene family (Ly-49G2). 293.

Masters, S.R. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.

Mathew, P.A. *See* Stoneman, Bennett, An, Chesnut, Wakeland, Scheerer, Siciliano, Kumar, and Mathew.

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Matsumoto, R. *See* Boyce, Friend, Matsumoto, Austen, and Owen.

Matsushima, A. *See* Yellin, Brett, Baum, Matsushima, Szabolcs, Stern, and Chess.

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— *See* Jones, Rivera, Sgadari, Franklin, Max, Bhatia, and Tosato.

Mayer, L. *See* Li, Yio, and Mayer.

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Mazer, B.D. *See* Gelfand, Weinberg, Mazer, Kadlecek, and Weiss.

McCaslin, D. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.

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McCoy, R., Haviland, D.L., Molmenti, E.P., Ziambaras, T., Wetsel, R.A., and Perlmutter, D.H. *N*-formylpeptide and complement C5a receptors are expressed in liver cells and mediate hepatic acute phase gene regulation. 207.

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McEvoy, L. *See* Altevogt, Hubbe, Ruppert, Lohr, von Hoegen, Sammar, Andrew, McEvoy, Humphries, and Butcher.

McGahon, A.J. *See* Martin, Reutelingsperger, McGahon, Rader, van Schie, LaFace, and Green.

McGeehan, G.M. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.

McKechnie, N.M. *See* Braun, McKechnie, and Gürr.

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McMahon-Pratt, D. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.

McMichael, A. *See* Barouch, Friede, Stevanović, Tussey, Smith, Rowland-Jones, Braud, McMichael, and Rammensee.

McMillan, L. *See* Scudamore, Thornton, McMillan, Newlands, and Miller.

McRae, B.L., Vanderlugt, C.L., Dal Canto, M.C., and Miller, S.D. Functional evidence for epitope spreading in the relapsing pathology of experimental autoimmune encephalomyelitis. 75.

Mehindate, K., Thibodeau, J., Dohlsten, M., Kalland, T., Sékaly, R.-P., and Mourad, W. Cross-linking of major histocompatibility complex class II molecules by staphylococcal enterotoxin A superantigen is a requirement for inflammatory cytokine gene expression. 1573.

Melief, C.J.M. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.

Melillo, G., Musso, T., Sica, A., Taylor, L.S., Cox, G.W., and Varesio, L. A hypoxia-responsive element mediates a novel pathway of activation of the inducible nitric oxide synthase promoter. 1683.

Menius, J.A. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.

Merino, R. *See* Grillot, Merino, and Núñez.

Merrill, J.E. *See* Koka, He, Zack, Kitchen, Peacock, Fried, Tran, Yashar, and Merrill.

Michetti, P. *See* Phalipon, Kaufmann, Michetti, Cavaillon, Huerre, Sansonetti, and Kraehenbuhl.

Migaki, G.I., Kahn, J., and Kishimoto, T.K. Mutational analysis of the membrane-proximal cleavage site of L-selectin: relaxed sequence specificity surrounding the cleavage site. 549.

Mignotte, B. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.
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Miller, D.K. *See* Singer, Scott, Chin, Bayne, Limjuco, Weidner, Miller, Chapman, and Kostura.
Miller, H.R.P. *See* Scudamore, Thornton, McMillan, Newlands, and Miller.
Miller, J., Knorr, R., Ferrone, M., Houdei, R., Carron, C.P., and Dustin, M.L. Intercellular adhesion molecule-1 dimerization and its consequences for adhesion mediated by lymphocyte function associated-1. 1231.
Miller, S.D. *See* McRae, Vanderlugt, Dal Canto, and Miller.
Mischel-Petty, N. *See* Hollenbaugh, Mischel-Petty, Edwards, Simon, Denfeld, Kiener, and Aruffo.
Misko, I.S. *See* Burrows, Silins, Moss, Khanna, Misko, and Argaet.
Mitchell, J.B. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.
Miyasaka, M. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.
Miyatake, S., Nakano, H., Park, S.Y., Yamazaki, T., Takase, K., Matsushime, H., Kato, A., and Saito, T. Induction of G1 arrest by down-regulation of cyclin D3 in T cell hybridomas. 401.
Mock, B.A. *See* Hilbert, Kopf, Mock, Köhler, and Rudikoff.
Möllby, R. *See* Winberg, Möllby, Bergström, Karlsson, Leonardsson, Milh, Teneberg, Haslam, Marklund, and Normark.
Molmenti, E.P. *See* McCoy, Haviland, Molmenti, Ziambaras, Wetsel, and Perlmutter.
Moore, J.P. *See* Sattentau and Moore.
Moore, K.W. *See* Suzuki, Tahara, Narula, Moore, Robbins, and Lotze.
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Morelli, L. *See* Moretta, Sivori, Vitale, Pende, Morelli, Augugliaro, Bottino, and Moretta.
Moretta, A., Sivori, S., Vitale, M., Pende, D., Morelli, L., Augugliaro, R., Bottino, C., and Moretta, L. Existence of both inhibitory (p58) and activatory (p50) receptors for HLA-C molecules in human natural killer cells. 875.
Moretta, L. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
— *See* Moretta, Sivori, Vitale, Pende, Morelli, Augugliaro, Bottino, and Moretta.
Morimoto, C. *See* Tachibana, Sato, D'Avirro, and Morimoto.
Morkowski, S., Goldrath, A.W., Eastman, S., Ramachandra, L., Freed, D.C., Whiteley, P., and Rudensky, A.Y. T cell recognition of major histocompatibility complex class II complexes with invariant chain processing intermediates. 1403.
Mosley, R.L. *See* Sperling, Green, Mosley, Smith, DiPaolo, Klein, Bluestone, and Thompson.
Mosmann, T.R. *See* Sad and Mosmann.
Moss, D.J. *See* Burrows, Silins, Moss, Khanna, Misko, and Argaet.
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Müller, W. *See* Berg, Leach, Kühn, Rajewsky, Müller, Davidson, and Rennick.
Muller, W.A. *See* Liao, Huynh, Eiroa, Greene, Polizzi, and Muller.
Murakami, M., Austen, K.F., and Arm, J.P. The immediate phase of c-*kit* ligand stimulation of mouse bone marrow–derived mast cells elicits rapid leukotriene C_4 generation through posttranslational activation of cytosolic phospholipase A_2 and 5-lipoxygenase. 197.
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Murphy, K.M. *See* Hosken, Shibuya, Heath, Murphy, and O'Garra.
Musso, T. *See* Melillo, Musso, Sica, Taylor, Cox, and Varesio.
Muzio, M., Polentarutti, N., Sironi, M., Poli, G., De Gioia, L., Introna, M., Mantovani, A., and Colotta, F. Cloning and characterization of a new isoform of the interleukin 1 receptor antagonist. 623.

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Nabeya, R.T. *See* Krueger, Wolfe, Nabeya, Vallat, Gilleaudeau, Heftler, Austin, and Gottlieb.
Naccache, P.H. *See* Hachicha, Naccache, and McColl.
Nagy, Z.A. *See* Falcioni, Vidović, Ward, Bolin, Singh, Shah, Ober, and Nagy.
Nakano, H. *See* Miyatake, Nakano, Park, Yamazaki, Takase, Matsushime, Kato, and Saito.
Nakayama, K. *See* Nakayama, Nakayama, Dustin, and Loh.
Nakayama, K.-i., Nakayama, K., Dustin, L.B., and Loh, D.Y. T–B cell interaction inhibits spontaneous apoptosis of mature lymphocytes in Bcl-2–deficient mice. 1101.
Nakayama, T. *See* Kishimoto, Kubo, Yorifuji, Nakayama, Asano, and Tada.
Nanda, N.K., Arzoo, K.K., Geysen, H.M., Sette, A., and Sercarz, E.E. Recognition of multiple peptide cores by a single T cell receptor. 531.
Narula, S. *See* Suzuki, Tahara, Narula, Moore, Robbins, and Lotze.
Neefjes, J.J. *See* Peters, Raposo, Neefjes, Oorschot, Leijendekker, Geuze, and Ploegh.
Neidhardt, E.-M. *See* Garrone, Neidhardt, Garcia, Galibert, van Kooten, and Banchereau.
Neurath, M.F., Fuss, I., Kelsall, B.L., Stüber, E., and Strober, W. Antibodies to interleukin 12 abrogate established experimental colitis in mice. 1281.
Neutra, M.R. *See* Hendrickson, Conner, Ladd, Kendall, Casanova, Corthesy, Max, Neutra, Seidman, and Seidman.
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Nijman, H.W., Kleijmeer, M.J., Ossevoort, M.A., Oorschot, V.M.J., Vierboom, M.P.M., van de Keur, M., Kenemans, P., Kast, W.M., Geuze, H.J., and Melief, C.J.M. Antigen capture and major histocompatibility class II compartments of freshly isolated and cultured human blood dendritic cells. 163.
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Ober, B. *See* Falcioni, Vidović, Ward, Bolin, Singh, Shah, Ober, and Nagy.
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— *See* Openshaw, Murphy, Hosken, Maino, Davis, Murphy, and O'Garra.
Ogata, A. *See* Chauhan, Kharbanda, Ogata, Urashima, Frank, Malik, Kufe, and Anderson.
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Oorschot, V. *See* Peters, Raposo, Neefjes, Oorschot, Leijendekker, Geuze, and Ploegh.
Oorschot, V.M.J. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Openshaw, P., Murphy, E.E., Hosken, N.A., Maino, V., Davis, K., Murphy, K., and O'Garra, A. Heterogeneity of intracellular cytokine synthesis at the single-cell level in polarized T helper 1 and T helper 2 populations. 1357.
Orange, J.S., Wang, B., Terhorst, C., and Biron, C.A. Requirement for natural killer cell–produced interferon γ in defense against murine cytomegalovirus infection and enhancement of this defense pathway by interleukin 12 administration. 1045.
Oriente, A. *See* Triggiani, Oriente, Seeds, Bass, Marone, and Chilton.
Oritani, K. *See* Katoh, Zheng, Oritani, Shimozato, and Kincade.
Orlic, D. *See* Bock, Orlic, Dunbar, Broxmeyer, and Bodine.
Orr, P.L. *See* Fedoseyeva, Tam, Orr, Garovoy, and Benichou.
Ortaldo, J.R. *See* Mason, Ortaldo, Young, Kumar, Bennett, and Anderson.
Ossevoort, M.A. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Otto, G. *See* Galle, Hofmann, Walczak, Schaller, Otto, Stremmel, Krammer, and Runkel.
Owen, M.J. *See* Hughes, Hayday, Craft, Owen, and Crispe.
Owen, W.F. *See* Boyce, Friend, Matsumoto, Austen, and Owen.

P

Paavonen, T. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.
Pacelli, R., Wink, D.A., Cook, J.A., Krishna, M.C., DeGraff, W., Friedman, N., Tsokos, M., Samuni, A., and Mitchell, J.B. Nitric oxide potentiates hydrogen peroxide–induced killing of *Escherichia coli*. 1469.
Page, D.M. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.
Pan, L.-Y. *See* Akhtar, Gold, Pan, Ferrara, Yang, Kim, and Tan.
Pannetier, C. *See* Romero, Pannetier, Herman, Jongeneel, Cerottini, and Coulie.
Pao, L. *See* Kurosaki, Johnson, Pao, Sada, Yamamura, and Cambier.
Papavasiliou, F., Jankovic, M., Suh, H., and Nussenzweig, M.C. The cytoplasmic domains of immunoglobulin (Ig) α and Igβ can independently induce the precursor B cell transition and allelic exclusion. 1389.
Pardoll, D.M. *See* Wu, Huang, Jaffee, Levitsky, and Pardoll.
Parham, P. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
Park, S.Y. *See* Arase, Ono, Arase, Park, Wakizaka, Watanabe, Ohno, and Saito.
— *See* Miyatake, Nakano, Park, Yamazaki, Takase, Matsushime, Kato, and Saito.
Parker, C.J. *See* Saifuddin, Parker, Peeples, Gorny, Zolla-Pazner, Ghassemi, Rooney, Atkinson, and Spear.
Parker, K.C. *See* Wizel, Houghten, Parker, Coligan, Church, Gordon, Ballou, and Hoffman.
Pasqualini, T. *See* Constant, Pfeiffer, Woodard, Pasqualini, and Bottomly.
Patte, C.P. *See* Saadi, Holzknecht, Patte, Stern, and Platt.
Paul, W.E. *See* Kinzer, Keegan, and Paul.
— *See* Ryan, Kinzer, and Paul.
Peacock, W. *See* Koka, He, Zack, Kitchen, Peacock, Fried, Tran, Yashar, and Merrill.
Pearlman, E., Lass, J.H., Bardenstein, D.S., Kopf, M., Hazlett, F.E., Jr., Diaconu, E., and Kazura, J.W. Interleukin 4 and T helper type 2 cells are required for development of experimental onchocercal keratitis (river blindness). 931.
Pedersen, B.K. *See* Ullum, Gøtzsche, Victor, Dickmeiss, Skinhøj, and Pedersen.
Peeples, M.E. *See* Saifuddin, Parker, Peeples, Gorny, Zolla-Pazner, Ghassemi, Rooney, Atkinson, and Spear.
Peeters, O. *See* Van den Eynde, Peeters, De Backer, Gaugler, Lucas, and Boon.
Pende, D. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
— *See* Moretta, Sivori, Vitale, Pende, Morelli, Augugliaro, Bottino, and Moretta.
Penner, E. *See* Węsierska-Gądek, Hohenauer, Hitchman, and Penner.
Penttilä, L. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.
Pereira, P., Gerber, D., Huang, S.Y., and Tonegawa, S. Ontogenic development and tissue distribution of Vγ1-expressing γ/δ T lymphocytes in normal mice. 1921.
Perlmutter, D.H. *See* McCoy, Haviland, Molmenti, Ziambaras, Wetsel, and Perlmutter.
Perlmutter, R.M. *See* Appleby, Kerner, Chien, Maliszewski, Bondadaá, and Perlmutter.
Perschl, A. *See* Lesley, English, Perschl, Gregoroff, and Hyman.
Perussia, B. *See* Aramburu, Azzoni, Rao, and Perussia.
Pescarmona, G. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Peters, P.J., Raposo, G., Neefjes, J.J., Oorschot, V., Leijendekker, R.L., Geuze, H.J., and Ploegh, H.L. Major histocompatibility complex class II compartments in human B lymphoblastoid cells are distinct from early endosomes. 325.
Peterson, J.W. *See* Klimpel, Chopra, Langley, Wypych, Annable, Kaiserlian, Ernst, and Peterson.
Peterson, P.A. *See* LaFace, Vestberg, Yang, Srivastava, DiSanto, Flomenberg, Brown, Sherman, and Peterson.
Petit, P.X. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.
Petrie, H.T., Livak, F., Burtrum, D., and Mazel, S. T cell receptor gene recombination patterns and mechanisms: cell death, rescue, and T cell production. 121.
Pfeiffer, C. *See* Constant, Pfeiffer, Woodard, Pasqualini, and Bottomly.
Phalipon, A., Kaufmann, M., Michetti, P., Cavaillon, J.-M., Huerre, M., Sansonetti, P., and Kraehenbuhl, J.-P. Monoclonal immunoglobulin A antibody directed against serotype-specific epitope of *Shigella flexneri* lipopolysaccharide protects against murine experimental shigellosis. 769.
Pircher, H. *See* Aichele, Brduscha-Riem, Zinkernagel, Hengartner, and Pircher.
— *See* Hombach, Pircher, Tonegawa, and Zinkernagel.
Platt, J.L. *See* Saadi, Holzknecht, Patte, Stern, and Platt.
Ploegh, H.L. *See* Peters, Raposo, Neefjes, Oorschot, Leijendekker, Geuze, and Ploegh.
Polacino, P.S., Liang, H.A., and Clark, E.A. Formation of simian immunodeficiency virus long terminal repeat circles in resting T cells requires both T cell receptor– and IL-2–dependent activation. 617.
Polentarutti, N. *See* Muzio, Polentarutti, Sironi, Poli, De Gioia, Introna, Mantovani, and Colotta.
Poli, G. *See* Muzio, Polentarutti, Sironi, Poli, De Gioia, Introna, Mantovani, and Colotta.
Polizzi, E. *See* Liao, Huynh, Eiroa, Greene, Polizzi, and Muller.
Ponath, P.D. *See* Sugawara, Scholl, Mahanta, Ponath, and Strominger.
Pope, M., Gezelter, S., Gallo, N., Hoffman, L., and Steinman, R.M. Low levels of HIV-1 infection in cutaneous dendritic cells promote extensive viral replication upon binding to memory CD4$^+$T cells. 2045.
Porcelli, S.A. *See* Behar, Porcelli, Beckman, and Brenner.
Porgador, A., and Gilboa, E. Bone marrow–generated dendritic cells pulsed with a class I–restricted peptide are potent inducers of cytotoxic T lymphocytes. 255.

Prak, E.L., and Weigert, M. Light chain replacement: a new model for antibody gene rearrangement. 541.
Prasad, S. *See* Spellerberg, Prasad, Cabellos, Burroughs, Cahill, and Tuomanen.
Prendergast, R.A. *See* Khurana, Prendergast, Alameddine, Tomé, Fardeau, Arahata, Sugita, and Kunkel.
Pritchard, D.I. *See* Hewitt, Brown, Hart, and Pritchard.
Pullen, A. *See* Scherer, Ignatowicz, Pullen, Kappler, and Marrack.
Puurunen, T. *See* Airas, Hellman, Salmi, Bono, Puurunen, Smith, and Jalkanen.

Q

Qian, S. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.

R

Rabin, R.L. *See* Liao, Rabin, Yannelli, Koniaris, Vanguri, and Farber.
Rachie, N. *See* Valentine, Czernik, Rachie, Hidaka, Fisher, Cambier, and Bomsztyk.
Rader, J.A. *See* Martin, Reutelingsperger, McGahon, Rader, van Schie, LaFace, and Green.
Raghow, R. *See* Laulederkind, Bielawska, Raghow, Hannun, and Ballou.
Rajewsky, K. *See* Berg, Leach, Kühn, Rajewsky, Müller, Davidson, and Rennick.
Rall, G.F., Mucke, L., and Oldstone, M.B.A. Consequences of cytotoxic T lymphocyte interaction with major histocompatibility complex class I–expressing neurons in vivo. 1201.
Ramachandra, L. *See* Morkowski, Goldrath, Eastman, Ramachandra, Freed, Whiteley, and Rudensky.
Rammensee, H.-G. *See* Arnold, Faath, Rammensee, and Schild.
— *See* Barouch, Friede, Stevanović, Tussey, Smith, Rowland-Jones, Braud, McMichael, and Rammensee.
Ransohoff, R.M. *See* Lu, Riley, Babcock, Huston, Stark, Boss, and Ransohoff.
Rao, A. *See* Aramburu, Azzoni, Rao, and Perussia.
Rao, A.S. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.
Raposo, G. *See* Peters, Raposo, Neefjes, Oorschot, Leijendekker, Geuze, and Ploegh.
Rapp, J.H. *See* Read, Grunfeld, Kumwenda, Calhoun, Kane, Feingold, and Rapp.
Read, T.E., Grunfeld, C., Kumwenda, Z.L., Calhoun, M.C., Kane, J.P., Feingold, K.R., and Rapp, J.H. Triglyceride-rich lipoproteins prevent septic death in rats. 267.
Reaman, G.H. *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.
Reddy, M. *See* Fargeas, Truneh, Reddy, Hurle, Sweet, and Sékaly.
Reed, S.G. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.
Reeder, J.C. *See* Rogerson, Chaiyaroj, Ng, Reeder, and Brown.
Reinherz, E.L. *See* Gollob, Li, Reinherz, and Ritz.
Reis e Sousa, C., and Germain, R.N. Major histocompatibility complex class I presentation of peptides derived from soluble exogenous antigen by a subset of cells engaged in phagocytosis. 841.
Renkonen, O. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.
Renkonen, R. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.
Rennick, D. *See* Berg, Leach, Kühn, Rajewsky, Müller, Davidson, and Rennick.
Reutelingsperger, C.P.M. *See* Martin, Reutelingsperger, McGahon, Rader, van Schie, LaFace, and Green.
Riganelli, D. *See* van Endert, Riganelli, Greco, Fleischhauer, Sidney, Sette, and Bach.
Rijkers, G.T. *See* Kooijman, Lauf, Kappers, and Rijkers.
Riley, J.L. *See* Lu, Riley, Babcock, Huston, Stark, Boss, and Ransohoff.
Riley, M.P. *See* Cerasoli, Riley, Shih, and Caton.
Ritz, J. *See* Gollob, Li, Reinherz, and Ritz.
Rivera, C. *See* Jones, Rivera, Sgadari, Franklin, Max, Bhatia, and Tosato.
Robbins, P.D. *See* Suzuki, Tahara, Narula, Moore, Robbins, and Lotze.
Robertson, M. *See* Tian, Taupin, Elledge, Robertson, and Anderson.
Rogerson, S.J., Chaiyaroj, S.C., Ng, K., Reeder, J.C., and Brown, G.V. Chondroitin sulfate A is a cell surface receptor for *Plasmodium falciparum*–infected erythrocytes. 15.
Rollins, S.A. *See* Rother, Fodor, Springhorn, Birks, Setter, Sandrin, Squinto, and Rollins.
Romagnani, S. *See* Del Prete, De Carli, D'Elios, Daniel, Almerigogna, Alderson, Smith, Thomas, and Romagnani.
Romagnoli, P., and Germain, R.N. Inhibition of invariant chain (Ii)–calnexin interaction results in enhanced degradation of Ii but does not prevent the assembly of αβIi complexes. 2027.
Romero, P., Pannetier, C., Herman, J., Jongeneel, C.V., Cerottini, J.-C., and Coulie, P.G. Multiple specificities in the repertoire of a melanoma patient's cytolytic T lymphocytes directed against tumor antigen MAGE-1.A1. 1019.
Rooney, I.A. *See* Saifuddin, Parker, Peeples, Gorny, Zolla-Pazner, Ghassemi, Rooney, Atkinson, and Spear.
Rosen, A. *See* Casciola-Rosen, Anhalt, and Rosen.
Rosenbaum, M. *See* Ferrari, Levin, Wallukat, Elies, Lebesgue, Chiale, Elizari, Rosenbaum, and Hoebeke.
Rother, R.P., Fodor, W.L., Springhorn, J.P., Birks, C.W., Setter, E., Sandrin, M.S., Squinto, S.P., and Rollins, S.A. A novel mechanism of retrovirus inactivation in human serum mediated by anti–α-galactosyl natural antibody. 1345.
Roullot, V. *See* Tronik-Le, Roux, Roullot, Schweitzer, Berthier, and Marguerie.
Rowland-Jones, S. *See* Barouch, Friede, Stevanović, Tussey, Smith, Rowland-Jones, Braud, McMichael, and Rammensee.
Ruddle, N.H. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.
Rudensky, A.Y. *See* Morkowski, Goldrath, Eastman, Ramachandra, Freed, Whiteley, and Rudensky.
Rudert, W.A. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.
Rudikoff, S. *See* Hilbert, Kopf, Mock, Köhler, and Rudikoff.
Runkel, L. *See* Galle, Hofmann, Walczak, Schaller, Otto, Stremmel, Krammer, and Runkel.
Ruppert, M. *See* Altevogt, Hubbe, Ruppert, Lohr, von Hoegen, Sammar, Andrew, McEvoy, Humphries, and Butcher.
Ruppert, T. *See* Eggers, Boes-Fabian, Ruppert, Kloetzel, and Koszinowski.
Russell, M.E. *See* Khoury, Gallon, Chen, Betres, Russell, Hancock, Carpenter, Sayegh, and Weiner.
Ryan, J.J., Kinzer, C.A., and Paul, W.E. Mast cells lacking the high affinity immunoglobulin E receptor are deficient in FcεRIγ messenger RNA. 567.

S

Saadi, S., Holzknecht, R.A., Patte, C.P., Stern, D.M., and Platt, J.L. Complement-mediated regulation of tissue factor activity in endothelium. 1807.
Sad, S., and Mosmann, T.R. Interleukin (IL) 4, in the absence of antigen stimulation, induces an anergy-like state in differentiated $CD8^+$ TC1 cells: loss of IL-2 synthesis and autonomous proliferation but retention of cytotoxicity and synthesis of other cytokines. 1505.
Sada, K. *See* Kurosaki, Johnson, Pao, Sada, Yamamura, and Cambier.
Saifuddin, M., Parker, C.J., Peeples, M.E., Gorny, M.K., Zolla-Pazner, S., Ghassemi, M., Rooney, I.A., Atkinson, J.P., and Spear, G.T. Role of virion-associated glycosylphosphatidylinositol-linked proteins CD55 and CD59 in complement resistance of cell line–derived and primary isolates of HIV-1. 501.
Saito, T. *See* Arase, Ono, Arase, Park, Wakizaka, Watanabe, Ohno, and Saito.
— *See* Miyatake, Nakano, Park, Yamazaki, Takase, Matsushime, Kato, and Saito.
Sakamoto, A. *See* Sumida, Sakamoto, Murata, Makino, Takahashi, Yoshida, Nishioka, Iwamoto, and Taniguchi.
Sallusto, F., Cella, M., Danieli, C., and Lanzavecchia, A. Dendritic cells use macropinocytosis and the mannose receptor to con-

centrate macromolecules in the major histocompatibility complex class II compartment: downregulation by cytokines and bacterial products. 389.

Salmi, M. *See* Airas, Hellman, Salmi, Bono, Puurunen, Smith, and Jalkanen.

Sammar, M. *See* Altevogt, Hubbe, Ruppert, Lohr, von Hoegen, Sammar, Andrew, McEvoy, Humphries, and Butcher.

Samuni, A. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.

Sanderson, S., Campbell, D.J., and Shastri, N. Identification of a $CD4^+$T cell–stimulating antigen of pathogenic bacteria by expression cloning. 1751.

Sandrin, M.S. *See* Rother, Fodor, Springhorn, Birks, Setter, Sandrin, Squinto, and Rollins.

Sansonetti, P. *See* Phalipon, Kaufmann, Michetti, Cavaillon, Huerre, Sansonetti, and Kraehenbuhl.

Santanelli, F. *See* Marchese, Chedid, Dirsch, Csaky, Santanelli, Latini, LaRochelle, Torrisi, and Aaronson.

Sant'Angelo, D. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.

Saoudi, A., Simmonds, S., Huitinga, I., and Mason, D. Prevention of experimental allergic encephalomyelitis in rats by targeting autoantigen to B cells: evidence that the protective mechanism depends on changes in the cytokine response and migratory properties of the autoantigen-specific T cells. 335.

Sato, K., Ohtsuka, K., Hasegawa, K., Yamagiwa, S., Watanabe, H., Asakura, H., and Abo, T. Evidence for extrathymic generation of intermediate T cell receptor cells in the liver revealed in thymectomized, irradiated mice subjected to bone marrow transplantation. 759.

Sato, T. *See* Tachibana, Sato, D'Avirro, and Morimoto.

Sattentau, Q.J., and Moore, J.P. Human immunodeficiency virus type 1 neutralization is determined by epitope exposure on the gp120 oligomer. 185.

Sautès, C. *See* Bouchard, Galinha, Tartour, Fridman, and Sautès.

Sayegh, M.H. *See* Khoury, Gallon, Chen, Betres, Russell, Hancock, Carpenter, Sayegh, and Weiner.

Schaller, H. *See* Galle, Hofmann, Walczak, Schaller, Otto, Stremmel, Krammer, and Runkel.

Schattner, E.J., Elkon, K.B., Yoo, D.-H., Tumang, J., Krammer, P.H., Crow, M.K., and Friedman, S.M. CD40 ligation induces Apo-1/Fas expression on human B lymphocytes and facilitates apoptosis through the Apo-1/Fas pathway. 1557.

Scheerer, J.B. *See* Stoneman, Bennett, An, Chesnut, Wakeland, Scheerer, Siciliano, Kumar, and Mathew.

Schendel, D.J. *See* Falk, Steinle, and Schendel.

Scherer, M.T., Ignatowicz, L., Pullen, A., Kappler, J., and Marrack, P. The use of mammary tumor virus (*Mtv*)–negative and single–*Mtv* mice to evaluate the effects of endogenous viral superantigens on the T cell repertoire. 1493.

Scheuermann, R.H., and Uhr, J.W. Connections between signal transduction components and cellular responses initiated by antigen receptor on B lymphocytes. 903.

Schild, H. *See* Arnold, Faath, Rammensee, and Schild.

Schimpl, A. *See* Krämer, Schimpl, and Hünig.

Schlegel, R.A. *See* Verhoven, Schlegel, and Williamson.

Schlievert, P.M. *See* Malchiodi, Eisenstein, Fields, Ohlendorf, Schlievert, Karjalainen, and Mariuzza.

Scholl, T. *See* Sugawara, Scholl, Mahanta, Ponath, and Strominger.

Schönberger, Ö. *See* Gallin, Jacobi, Büttner, Schönberger, Marti, and Erttmann.

Schoneveld, A. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.

Schriever, F. *See* Behr and Schriever.

Schweitzer, A. *See* Tronik-Le, Roux, Roullot, Schweitzer, Berthier, and Marguerie.

Scott, S. *See* Singer, Scott, Chin, Bayne, Limjuco, Weidner, Miller, Chapman, and Kostura.

Scudamore, C.L., Thornton, E.M., McMillan, L., Newlands, G.F.J., and Miller, H.R.P. Release of the mucosal mast cell granule chymase, rat mast cell protease-II, during anaphylaxis is associated with the rapid development of paracellular permeability to macromolecules in rat jejunum. 1871.

Sebastiani, G. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.

Seder, R.A., Grabstein, K.H., Berzofsky, J.A., and McDyer, J.F. Cytokine interactions in human immunodeficiency virus–infected individuals: roles of interleukin (IL)-2, IL-12, and IL-15. 1067.

Seeds, M.C. *See* Triggiani, Oriente, Seeds, Bass, Marone, and Chilton.

Seidman, C.E. *See* Hendrickson, Conner, Ladd, Kendall, Casanova, Corthesy, Max, Neutra, Seidman, and Seidman.

Seidman, J.G. *See* Hendrickson, Conner, Ladd, Kendall, Casanova, Corthesy, Max, Neutra, Seidman, and Seidman.

Sékaly, R.-P. *See* Fargeas, Truneh, Reddy, Hurle, Sweet, and Sékaly.

— *See* Fleury, Thibodeau, Croteau, Labrecque, Aronson, Cantin, Long, and Sékaly.

— *See* Mehindate, Thibodeau, Dohlsten, Kalland, Sékaly, and Mourad.

Sekut, L. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.

Sengupta, T.K. *See* Wang, Sengupta, Zhong, and Ivashkiv.

Seppo, A. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.

Sercarz, E.E. *See* Nanda, Arzoo, Geysen, Sette, and Sercarz.

Sette, A. *See* Nanda, Arzoo, Geysen, Sette, and Sercarz.

— *See* van Endert, Riganelli, Greco, Fleischhauer, Sidney, Sette, and Bach.

Setter, E. *See* Rother, Fodor, Springhorn, Birks, Setter, Sandrin, Squinto, and Rollins.

Sgadari, C. *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.

— *See* Jones, Rivera, Sgadari, Franklin, Max, Bhatia, and Tosato.

Shah, H. *See* Falcioni, Vidović, Ward, Bolin, Singh, Shah, Ober, and Nagy.

Shamblott, M.J. *See* Anderson, Shamblott, Litman, and Litman.

Sharples, C. *See* Cabrera, Shaw, Sharples, Williams, Castes, Convit, and Blackwell.

Shastri, N. *See* Malarkannan, Afkarian, and Shastri.

— *See* Sanderson, Campbell, and Shastri.

Shaw, M.-A. *See* Cabrera, Shaw, Sharples, Williams, Castes, Convit, and Blackwell.

Shen, L. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.

Shen, X. *See* König, Shen, and Germain.

Sher, A. *See* Epstein, Di Rosa, Jankovic, Sher, and Matzinger.

Sherman, L.A. *See* LaFace, Vestberg, Yang, Srivastava, DiSanto, Flomenberg, Brown, Sherman, and Peterson.

Shibuya, K. *See* Hosken, Shibuya, Heath, Murphy, and O'Garra.

Shih, F.F. *See* Cerasoli, Riley, Shih, and Caton.

Shimozato, T. *See* Katoh, Zheng, Oritani, Shimozato, and Kincade.

Sica, A. *See* Melillo, Musso, Sica, Taylor, Cox, and Varesio.

Siciliano, M.J. *See* Stoneman, Bennett, An, Chesnut, Wakeland, Scheerer, Siciliano, Kumar, and Mathew.

Sidney, J. *See* van Endert, Riganelli, Greco, Fleischhauer, Sidney, Sette, and Bach.

Siegrist, C.-A., Martinez-Soria, E., Kern, I., and Mach, B. A novel antigen-processing–defective phenotype in major histocompatibility complex class II–positive CIITA transfectants is corrected by interferon-γ. 1793.

Silins, S.L. *See* Burrows, Silins, Moss, Khanna, Misko, and Argaet.

Simmonds, S. *See* Saoudi, Simmonds, Huitinga, and Mason.

Simon, J.C. *See* Hollenbaugh, Mischel-Petty, Edwards, Simon, Denfeld, Kiener, and Aruffo.

Singer, I.I., Scott, S., Chin, J., Bayne, E.K., Limjuco, G., Weidner, J., Miller, D.K., Chapman, K., and Kostura, M.J. The interleukin-1β–converting enzyme (ICE) is localized on the external cell surface membranes and in the cytoplasmic ground substance of human monocytes by immuno–electron microscopy. 1447.

Singh, G. *See* Falcioni, Vidović, Ward, Bolin, Singh, Shah, Ober, and Nagy.

Sironi, M. *See* Muzio, Polentarutti, Sironi, Poli, De Gioia, Introna, Mantovani, and Colotta.

Sivori, S. *See* Moretta, Sivori, Vitale, Pende, Morelli, Augugliaro, Bottino, and Moretta.

Skamene, E. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.

Skeiky, Y.A.W. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.
Skinhøj, P. *See* Ullum, Gøtzsche, Victor, Dickmeiss, Skinhøj, and Pedersen.
Skorski, T., Nieborowska-Skorska, M., Campbell, K., Iozzo, R.V., Zon, G., Darzynkiewicz, Z., and Calabretta, B. Leukemia treatment in severe combined immunodeficiency mice by antisense oligodeoxynucleotides targeting cooperating oncogenes. 1645.
Smith, C.A. *See* Del Prete, De Carli, D'Elios, Daniel, Almerigogna, Alderson, Smith, Thomas, and Romagnani.
Smith, D.J. *See* Airas, Hellman, Salmi, Bono, Puurunen, Smith, and Jalkanen.
Smith, K. *See* Barouch, Friede, Stevanović, Tussey, Smith, Rowland-Jones, Braud, McMichael, and Rammensee.
Smith, P.L. *See* Sperling, Green, Mosley, Smith, DiPaolo, Klein, Bluestone, and Thompson.
Smith, S.C. *See* Donermeyer, Beisel, Allen, and Smith.
Sodroski, J. *See* Chen, Kou, Lekutis, Shen, Zhou, Halloran, Li, Sodroski, Lee-Parritz, and Letvin.
Soong, L. *See* Campos-Neto, Soong, Cordova, Sant'Angelo, Skeiky, Ruddle, Reed, Janeway, and McMahon-Pratt.
Spear, G.T. *See* Saifuddin, Parker, Peeples, Gorny, Zolla-Pazner, Ghassemi, Rooney, Atkinson, and Spear.
Spellerberg, B., Prasad, S., Cabellos, C., Burroughs, M., Cahill, P., and Tuomanen, E. Penetration of the blood–brain barrier: enhancement of drug delivery and imaging by bacterial glycopeptides. 1037.
Spencer, J. *See* Dunn-Walters, Isaacson, and Spencer.
Sperling, A.I., Green, J.M., Mosley, R.L., Smith, P.L., DiPaolo, R.J., Klein, J.R., Bluestone, J.A., and Thompson, C.B. CD43 is a murine T cell costimulatory receptor that functions independently of CD28. 139.
Sprent, J. *See* Ernst, Surh, and Sprent.
Springhorn, J.P. *See* Rother, Fodor, Springhorn, Birks, Setter, Sandrin, Squinto, and Rollins.
Squinto, S.P. *See* Rother, Fodor, Springhorn, Birks, Setter, Sandrin, Squinto, and Rollins.
Srivastava, P.K. *See* Levey and Srivastava.
Srivastava, R. *See* LaFace, Vestberg, Yang, Srivastava, DiSanto, Flomenberg, Brown, Sherman, and Peterson.
Stankovic, A.K. *See* Billips, Nuñez, Bertrand, Stankovic, Gartland, Burrows, and Cooper.
Staprans, S.I., Hamilton, B.L., Follansbee, S.E., Elbeik, T., Barbosa, P., Grant, R.M., and Feinberg, M.B. Activation of virus replication after vaccination of HIV-1–infected individuals. 1727.
Stark, G.R. *See* Lu, Riley, Babcock, Huston, Stark, Boss, and Ransohoff.
Starzl, T.E. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.
Steinle, A. *See* Falk, Steinle, and Schendel.
Steinman, R.M., and Swanson, J. The endocytic activity of dendritic cells. 283.
— *See* Pope, Gezelter, Gallo, Hoffman, and Steinman.
Stern, D. *See* Yellin, Brett, Baum, Matsushima, Szabolcs, Stern, and Chess.
Stern, D.M. *See* Saadi, Holzknecht, Patte, Stern, and Platt.
Stevanović, S. *See* Barouch, Friede, Stevanović, Tussey, Smith, Rowland-Jones, Braud, McMichael, and Rammensee.
Stimpson, S.A. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.
Stoneman, E.R., Bennett, M., An, J., Chesnut, K.A., Wakeland, E.K., Scheerer, J.B., Siciliano, M.J., Kumar, V., and Mathew, P.A. Cloning and characterization of 5E6(*Ly-49C*), a receptor molecule expressed on a subset of murine natural killer cells. 305.
Strand, C. *See* Windhagen, Newcombe, Dangond, Strand, Woodroofe, Cuzner, and Hafler.
Stremmel, W. *See* Galle, Hofmann, Walczak, Schaller, Otto, Stremmel, Krammer, and Runkel.
Strober, W. *See* Neurath, Fuss, Kelsall, Stüber, and Strober.
Strominger, J.L. *See* Abdulkadir, Krishna, Thanos, Maniatis, Strominger, and Ono.
— *See* Hudson, Tiedemann, Urban, Lowe, Strominger, and Fraser.
— *See* Sugawara, Scholl, Mahanta, Ponath, and Strominger.
Stüber, E. *See* Neurath, Fuss, Kelsall, Stüber, and Strober.
Stuchin, S.A. *See* Amin, Di Cesare, Vyas, Attur, Tzeng, Billiar, Stuchin, and Abramson.
Stumbles, P., and Mason, D. Activation of $CD4^+$ cells in the presence of a nondepleting monoclonal antibody to CD4 induces a Th2-type response in vitro. 5.
Suda, T. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Sugawara, M., Scholl, T., Mahanta, S.K., Ponath, P.D., and Strominger, J.L. Cooperativity between the J and S elements of class II major histocompatibility complex genes as enhancers in normal and class II–negative patient and mutant B cell lines. 175.
Sugita, H. *See* Khurana, Prendergast, Alameddine, Tomé, Fardeau, Arahata, Sugita, and Kunkel.
Suh, H. *See* Papavasiliou, Jankovic, Suh, and Nussenzweig.
Sumida, T., Sakamoto, A., Murata, H., Makino, Y., Takahashi, H., Yoshida, S., Nishioka, K., Iwamoto, I., and Taniguchi, M. Selective reduction of T cells bearing invariant $V\alpha24J\alpha Q$ antigen receptor in patients with systemic sclerosis. 1163.
Sun, J., Leahy, D.J., and Kavathas, P.B. Interaction between CD8 and major histocompatibility complex (MHC) class I mediated by multiple contact surfaces that include the $\alpha2$ and $\alpha3$ domains of MHC class I. 1275.
Surh, C.D. *See* Ernst, Surh, and Sprent.
Susin, S.A. *See* Zamzami, Marchetti, Castedo, Decaudin, Macho, Hirsch, Susin, Petit, Mignotte, and Kroemer.
Suzuki, T., Tahara, H., Narula, S., Moore, K.W., Robbins, P.D., and Lotze, M.T. Viral interleukin 10 (IL-10), the human herpes virus 4 cellular IL-10 homologue, induces local anergy to allogeneic and syngeneic tumors. 477.
Swain, S.L. *See* Zhang, Giangreco, Broome, Dargan, and Swain.
Swanson, J. *See* Chen, Belland, Wilson, and Swanson.
Swanson, J. *See* Steinman and Swanson.
Sweet, R. *See* Fargeas, Truneh, Reddy, Hurle, Sweet, and Sékaly.
Szabolcs, M. *See* Yellin, Brett, Baum, Matsushima, Szabolcs, Stern, and Chess.
Szabolcs, P. *See* Young, Szabolcs, and Moore.

T

Tachibana, K., Sato, T., D'Avirro, N., and Morimoto, C. Direct association of $pp125^{FAK}$ with paxillin, the focal adhesion–targeting mechanism of $pp125^{FAK}$ 1089.
Tada, T. *See* Kishimoto, Kubo, Yorifuji, Nakayama, Asano, and Tada.
Taga, T. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Tahara, H. *See* Suzuki, Tahara, Narula, Moore, Robbins, and Lotze.
Takahashi, H. *See* Sumida, Sakamoto, Murata, Makino, Takahashi, Yoshida, Nishioka, Iwamoto, and Taniguchi.
Takahashi, N. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Takase, K. *See* Miyatake, Nakano, Park, Yamazaki, Takase, Matsushime, Kato, and Saito.
Takata, M., Homma, Y., and Kurosaki, T. Requirement of phospholipase C-$\gamma2$ activation in surface immunoglobulin M–induced B cell apoptosis. 907.
Takechi, Y. *See* Hara, Takechi, and Houghton.
Takiguchi, M. *See* Zivny, Kurane, Leporati, Ibe, Takiguchi, Zeng, Brinton, and Ennis.
Tam, R.C. *See* Fedoseyeva, Tam, Orr, Garovoy, and Benichou.
Tamura, T. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Tan, K.-N. *See* Akhtar, Gold, Pan, Ferrara, Yang, Kim, and Tan.
Tangri, S. *See* Cardell, Tangri, Chan, Kronenberg, Benoist, and Mathis.
Taniguchi, M. *See* Sumida, Sakamoto, Murata, Makino, Takahashi, Yoshida, Nishioka, Iwamoto, and Taniguchi.
Tartour, E. *See* Bouchard, Galinha, Tartour, Fridman, and Sautès.
Taub, D.D. *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.
Taupin, J.-L. *See* Tian, Taupin, Elledge, Robertson, and Anderson.
Taylor, L.S. *See* Melillo, Musso, Sica, Taylor, Cox, and Varesio.
Tedder, T.F. *See* Chen, Engel, and Tedder.

Teneberg, S. *See* Winberg, Möllby, Bergström, Karlsson, Leonardsson, Milh, Teneberg, Haslam, Marklund, and Normark.
Terhorst, C. *See* Orange, Wang, Terhorst, and Biron.
Thanos, D. *See* Abdulkadir, Krishna, Thanos, Maniatis, Strominger, and Ono.
Thibodeau, J. *See* Fleury, Thibodeau, Croteau, Labrecque, Aronson, Cantin, Long, and Sékaly.
— *See* Mehindate, Thibodeau, Dohlsten, Kalland, Sékaly, and Mourad.
Thomas, E. *See* Del Prete, De Carli, D'Elios, Daniel, Almerigogna, Alderson, Smith, Thomas, and Romagnani.
Thompson, C.B. *See* Chao, Linette, Boise, White, Thompson, and Korsmeyer.
— *See* Sperling, Green, Mosley, Smith, DiPaolo, Klein, Bluestone, and Thompson.
Thomson, A.W. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.
Thornton, E.M. *See* Scudamore, Thornton, McMillan, Newlands, and Miller.
Tian, Q., Taupin, J.-L., Elledge, S., Robertson, M., and Anderson, P. Fas-activated serine/threonine kinase (FAST) phosphorylates TIA-1 during Fas-mediated apoptosis. 865.
Tiedemann, R.E. *See* Hudson, Tiedemann, Urban, Lowe, Strominger, and Fraser.
Tiisala, S. *See* Turunen, Majuri, Seppo, Tiisala, Paavonen, Miyasaka, Lemström, Penttilä, Renkonen, and Renkonen.
Tillie, I. *See* Wallaert, Desreumaux, Copin, Tillie, Benard, Colombel, Gosselin, Tonnel, and Janin.
Todde, R. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Tomé, F.M.S. *See* Khurana, Prendergast, Alameddine, Tomé, Fardeau, Arahata, Sugita, and Kunkel.
Tonegawa, S. *See* Hombach, Pircher, Tonegawa, and Zinkernagel.
— *See* Pereira, Gerber, Huang, and Tonegawa.
Tonnel, A.B. *See* Wallaert, Desreumaux, Copin, Tillie, Benard, Colombel, Gosselin, Tonnel, and Janin.
Torrisi, M.R. *See* Marchese, Chedid, Dirsch, Csaky, Santanelli, Latini, LaRochelle, Torrisi, and Aaronson.
Torzewski, J. *See* Bhakdi, Dorweiler, Kirchmann, Torzewski, Weise, Tranum-Jensen, Walev, and Wieland.
Tosato, G. *See* Angiolillo, Sgadari, Taub, Liao, Farber, Maheshwari, Kleinman, Reaman, and Tosato.
— *See* Jones, Rivera, Sgadari, Franklin, Max, Bhatia, and Tosato.
Tran, T. *See* Koka, He, Zack, Kitchen, Peacock, Fried, Tran, Yashar, and Merrill.
Tranum-Jensen, J. *See* Bhakdi, Dorweiler, Kirchmann, Torzewski, Weise, Tranum-Jensen, Walev, and Wieland.
Tremblay, M.L. *See* Vidal, Tremblay, Govoni, Gauthier, Sebastiani, Malo, Skamene, Olivier, Jothy, and Gros.
Triggiani, M., Oriente, A., Seeds, M.C., Bass, D.A., Marone, G., and Chilton, F.H. Migration of human inflammatory cells into the lung results in the remodeling of arachidonic acid into a triglyceride pool. 1181.
Tronik-Le Roux, D., Roullot, V., Schweitzer, A., Berthier, R., and Marguerie, G. Suppression of erythro-megakaryocytopoiesis and the induction of reversible thrombocytopenia in mice transgenic for the thymidine kinase gene targeted by platelet growth glycoprotein IIb promoter: Correction. 1177.
Trucco, M. *See* Lu, Rudert, Qian, McCaslin, Fu, Rao, Trucco, Fung, Starzl, and Thomson.
Truneh, A. *See* Fargeas, Truneh, Reddy, Hurle, Sweet, and Sékaly.
Tsang, M. *See* Cao, Chen, Weatherbee, Tsang, and Folkman.
Tseng, C.-E. *See* Chan, Di Donato, Hamel, Tseng, and Buyon.
Tsokos, M. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.
Tumang, J. *See* Schattner, Elkon, Yoo, Tumang, Krammer, Crow, and Friedman.
Tuomanen, E. *See* Spellerberg, Prasad, Cabellos, Burroughs, Cahill, and Tuomanen.
Turunen, J.P., Majuri, M.-L., Seppo, A., Tiisala, S., Paavonen, T., Miyasaka, M., Lemström, K., Penttilä, L., Renkonen, O., and Renkonen, R. De novo expression of endothelial sialyl Lewis^a and sialyl Lewis^x during cardiac transplant rejection: superior capacity of a tetravalent sialyl Lewis^x oligosaccharide in inhibiting L-selectin–dependent lymphocyte adhesion. 1133.
Tussey, L. *See* Barouch, Friede, Stevanović, Tussey, Smith, Rowland-Jones, Braud, McMichael, and Rammensee.
Tygrett, L. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.
Tzeng, E. *See* Amin, Di Cesare, Vyas, Attur, Tzeng, Billiar, Stuchin, and Abramson.

U

Udagawa, N., Takahashi, N., Katagiri, T., Tamura, T., Wada, S., Findlay, D.M., Martin, T.J., Hirota, H., Taga, T., Kishimoto, T., and Suda, T. Interleukin (IL) 6 induction of osteoclast differentiation depends on IL-6 receptors expressed on osteoblastic cells but not on osteoclast progenitors. 1461.
Uhr, J.W. *See* Scheuermann and Uhr.
Ulliers, D. *See* Ghigo, Todde, Ginsburg, Costamagna, Gautret, Bussolino, Ulliers, Giribaldi, Deharo, Gabrielli, Pescarmona, and Bosia.
Ullum, H., Gøtzsche, P.C., Victor, J., Dickmeiss, E., Skinhøj, P., and Pedersen, B.K. Defective natural immunity: an early manifestation of human immunodeficiency virus infection. 789.
Urashima, M. *See* Chauhan, Kharbanda, Ogata, Urashima, Frank, Malik, Kufe, and Anderson.
Urban, R.G. *See* Hudson, Tiedemann, Urban, Lowe, Strominger, and Fraser.

V

Valentine, M.A., Czernik, A.J., Rachie, N., Hidaka, H., Fisher, C.L., Cambier, J.C., and Bomsztyk, K. Anti–immunoglobulin M activates nuclear calcium/calmodulin-dependent protein kinase II in human B lymphocytes. 1943.
Vallat, V.P. *See* Krueger, Wolfe, Nabeya, Vallat, Gilleaudeau, Heftler, Austin, and Gottlieb.
van de Keur, M. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Van den Eynde, B., Peeters, O., De Backer, O., Gaugler, B., Lucas, S., and Boon, T. A new family of genes coding for an antigen recognized by autologous cytolytic T lymphocytes on a human melanoma. 689.
Vanderlugt, C.L. *See* McRae, Vanderlugt, Dal Canto, and Miller.
van Endert, P.M., Riganelli, D., Greco, G., Fleischhauer, K., Sidney, J., Sette, A., and Bach, J.-F. The peptide-binding motif for the human transporter associated with antigen processing. 1883.
Vanguri, P. *See* Liao, Rabin, Yannelli, Koniaris, Vanguri, and Farber.
van Kooten, C. *See* Garrone, Neidhardt, Garcia, Galibert, van Kooten, and Banchereau.
van Oers, N.S.C., von Boehmer, H., and Weiss, A. The pre–T cell receptor (TCR) complex is functionally coupled to the TCR-ζ subunit. 1585.
van Schie, R.C.A.A. *See* Martin, Reutelingsperger, McGahon, Rader, van Schie, LaFace, and Green.
van Seventer, G.A. *See* Maguire, Danahey, Burkly, and van Seventer.
Varesio, L. *See* Melillo, Musso, Sica, Taylor, Cox, and Varesio.
Vaysburd, M., Lock, C., and McDevitt, H. Prevention of insulin-dependent diabetes mellitus in nonobese diabetic mice by immunogenic but not by tolerated peptides. 897.
Verdiani, S. *See* Biassoni, Falco, Cambiaggi, Costa, Verdiani, Pende, Conte, Di Donato, Parham, and Moretta.
Verhoven, B., Schlegel, R.A., and Williamson, P. Mechanisms of phosphatidylserine exposure, a phagocyte recognition signal, on apoptotic T lymphocytes. 1597.
Vestberg, M. *See* LaFace, Vestberg, Yang, Srivastava, DiSanto, Flomenberg, Brown, Sherman, and Peterson.
Victor, J. *See* Ullum, Gøtzsche, Victor, Dickmeiss, Skinhøj, and Pedersen.
Vidal, S., Tremblay, M.L., Govoni, G., Gauthier, S., Sebastiani, G., Malo, D., Skamene, E., Olivier, M., Jothy, S., and Gros, P. The *Ity/Lsh/Bcg* locus: natural resistance to infection with intracellular parasites is abrogated by disruption of the *Nramp1* gene. 655.

Vidović, D. *See* Falcioni, Vidović, Ward, Bolin, Singh, Shah, Ober, and Nagy.
Vierboom, M.P.M. *See* Nijman, Kleijmeer, Ossevoort, Oorschot, Vierboom, van de Keur, Kenemans, Kast, Geuze, and Melief.
Vitale, M. *See* Moretta, Sivori, Vitale, Pende, Morelli, Augugliaro, Bottino, and Moretta.
von Boehmer, H. *See* van Oers, von Boehmer, and Weiss.
von Hoegen, P. *See* Altevogt, Hubbe, Ruppert, Lohr, von Hoegen, Sammar, Andrew, McEvoy, Humphries, and Butcher.
Vyas, P. *See* Amin, Di Cesare, Vyas, Attur, Tzeng, Billiar, Stuchin, and Abramson.

W

Wada, S. *See* Udagawa, Takahashi, Katagiri, Tamura, Wada, Findlay, Martin, Hirota, Taga, Kishimoto, and Suda.
Wakefield, J.A. *See* Conway, Wakefield, Brown, Marron, Sekut, Stimpson, McElroy, Menius, Jeffreys, Clark, McGeehan, and Connolly.
Wakeland, E.K. *See* Stoneman, Bennett, An, Chesnut, Wakeland, Scheerer, Siciliano, Kumar, and Mathew.
Wakizaka, K. *See* Arase, Ono, Arase, Park, Wakizaka, Watanabe, Ohno, and Saito.
Walczak, H. *See* Galle, Hofmann, Walczak, Schaller, Otto, Stremmel, Krammer, and Runkel.
Waldschmidt, T.J. *See* Foy, Page, Waldschmidt, Schoneveld, Laman, Masters, Tygrett, Ledbetter, Aruffo, Claassen, Xu, Flavell, Oehen, Hedrick, and Noelle.
Walev, I. *See* Bhakdi, Dorweiler, Kirchmann, Torzewski, Weise, Tranum-Jensen, Walev, and Wieland.
Wallaert, B., Desreumaux, P., Copin, M.C., Tillie, I., Benard, A., Colombel, J.F., Gosselin, B., Tonnel, A.B., and Janin, A. Immunoreactivity for interleukin 3 and 5 and granulocyte/macrophage colony-stimulating factor of intestinal mucosa in bronchial asthma. 1897.
Wallukat, G. *See* Ferrari, Levin, Wallukat, Elies, Lebesgue, Chiale, Elizari, Rosenbaum, and Hoebeke.
Wang, B. *See* Orange, Wang, Terhorst, and Biron.
Wang, F., Sengupta, T.K., Zhong, Z., and Ivashkiv, L.B. Regulation of the balance of cytokine production and the signal transducer and activator of transcription (STAT) transcription factor activity by cytokines and inflammatory synovial fluids. 1825.
Wang, F.-h. *See* Yasunaga, Wang, Kunisada, Nishikawa, and Nishikawa.
Ward, E.S. *See* Falcioni, Vidović, Ward, Bolin, Singh, Shah, Ober, and Nagy.
Watanabe, H. *See* Arase, Ono, Arase, Park, Wakizaka, Watanabe, Ohno, and Saito.
— *See* Sato, Ohtsuka, Hasegawa, Yamagiwa, Watanabe, Asakura, and Abo.
Weatherbee, J.A. *See* Cao, Chen, Weatherbee, Tsang, and Folkman.
Weidner, J. *See* Singer, Scott, Chin, Bayne, Limjuco, Weidner, Miller, Chapman, and Kostura.
Weigert, M. *See* Prak and Weigert.
Weinberg, K. *See* Gelfand, Weinberg, Mazer, Kadlecek, and Weiss.
Weiner, H.L. *See* Khoury, Gallon, Chen, Betres, Russell, Hancock, Carpenter, Sayegh, and Weiner.
Weise, E. *See* Bhakdi, Dorweiler, Kirchmann, Torzewski, Weise, Tranum-Jensen, Walev, and Wieland.
Weiss, A. *See* Gelfand, Weinberg, Mazer, Kadlecek, and Weiss.
— *See* van Oers, von Boehmer, and Weiss.
Weiss, N.A. *See* Willimann, Matile, Weiss, and Imhof.
Węsierska-Gądek, J., Hohenauer, H., Hitchman, E., and Penner, E. Autoantibodies from patients with primary biliary cirrhosis preferentially react with the amino-terminal domain of nuclear pore complex glycoprotein gp210. 1159.
Wetsel, R.A. *See* McCoy, Haviland, Molmenti, Ziambaras, Wetsel, and Perlmutter.
White, L.S. *See* Chao, Linette, Boise, White, Thompson, and Korsmeyer.
Whiteley, P. *See* Morkowski, Goldrath, Eastman, Ramachandra, Freed, Whiteley, and Rudensky.
Wieland, E. *See* Bhakdi, Dorweiler, Kirchmann, Torzewski, Weise, Tranum-Jensen, Walev, and Wieland.
Williams, H. *See* Cabrera, Shaw, Sharples, Williams, Castes, Convit, and Blackwell.
Williams, T.J. *See* Collins, Marleau, Griffiths-Johnson, Jose, and Williams.
Williamson, P. *See* Verhoven, Schlegel, and Williamson.
Willimann, K., Matile, H., Weiss, N.A., and Imhof, B.A. In vivo sequestration of *Plasmodium falciparum*–infected human erythrocytes: a severe combined immunodeficiency mouse model for cerebral malaria. 643.
Wills-Karp, M. *See* Gavett, O'Hearn, Li, Huang, Finkelman, and Wills-Karp.
Wilson, J. *See* Chen, Belland, Wilson, and Swanson.
Winberg, J., Möllby, R., Bergström, J., Karlsson, K.-A., Leonardsson, I., Milh, M.A., Teneberg, S., Haslam, D., Marklund, B.-I., and Normark, S. The PapG-adhesin at the tip of P-fimbriae provides *Escherichia coli* with a competitive edge in experimental bladder infections of cynomolgus monkeys. 1695.
Windhagen, A., Newcombe, J., Dangond, F., Strand, C., Woodroofe, M.N., Cuzner, M.L., and Hafler, D.A. Expression of costimulatory molecules B7-1 (CD80), B7-2 (CD86), and interleukin 12 cytokine in multiple sclerosis lesions. 1985.
Wink, D.A. *See* Pacelli, Wink, Cook, Krishna, DeGraff, Friedman, Tsokos, Samuni, and Mitchell.
Wizel, B., Houghten, R.A., Parker, K.C., Coligan, J.E., Church, P., Gordon, D.M., Ballou, W.R., and Hoffman, S.L. Irradiated sporozoite vaccine induces HLA-B8–restricted cytotoxic T lymphocyte responses against two overlapping epitopes of the *Plasmodium falciparum* sporozoite surface protein 2. 1435.
Wleklinski, M. *See* Kahn, Wleklinski, Aruffo, Farr, Coder, and Kahn.
Wolfe, J.T. *See* Krueger, Wolfe, Nabeya, Vallat, Gilleaudeau, Heftler, Austin, and Gottlieb.
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